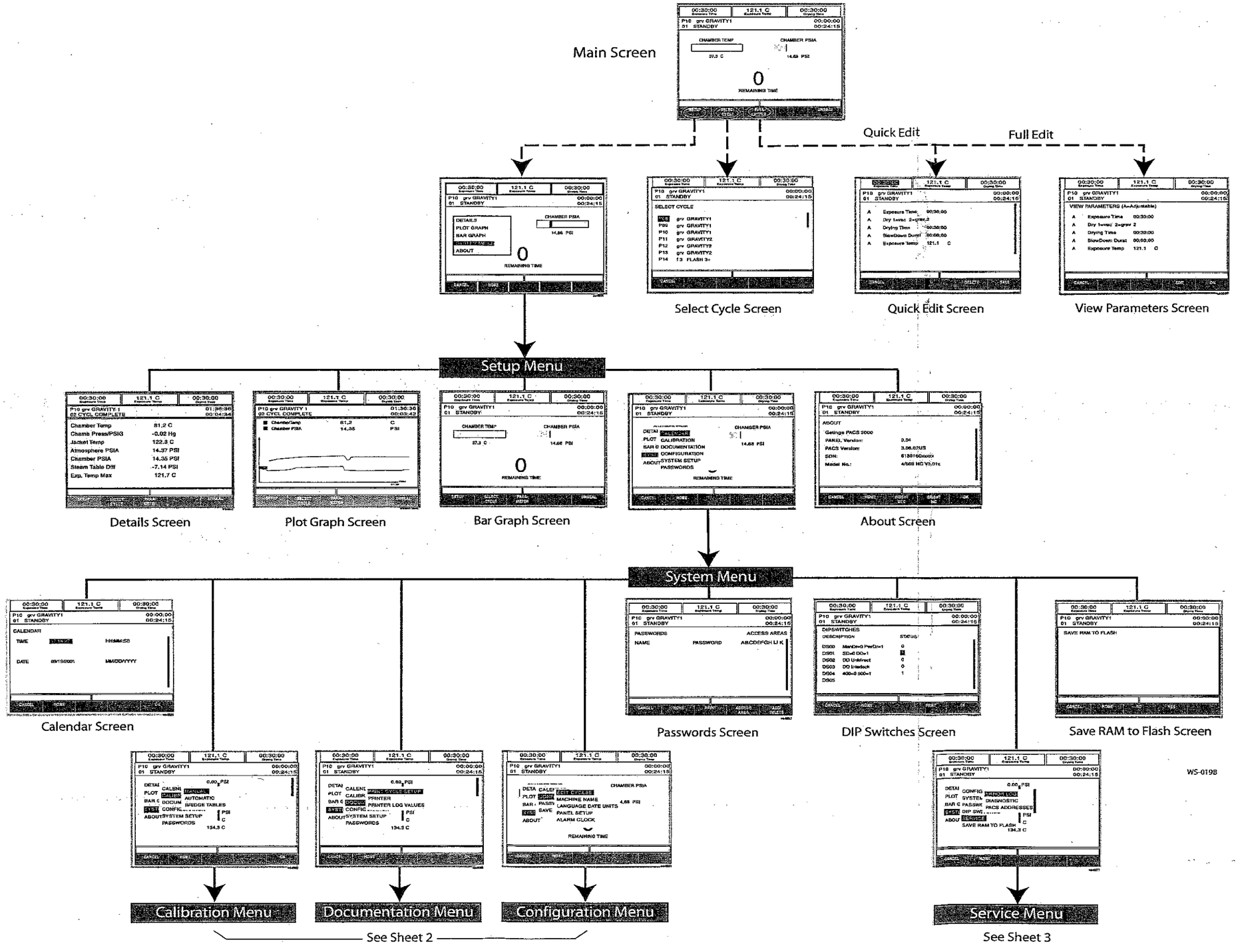
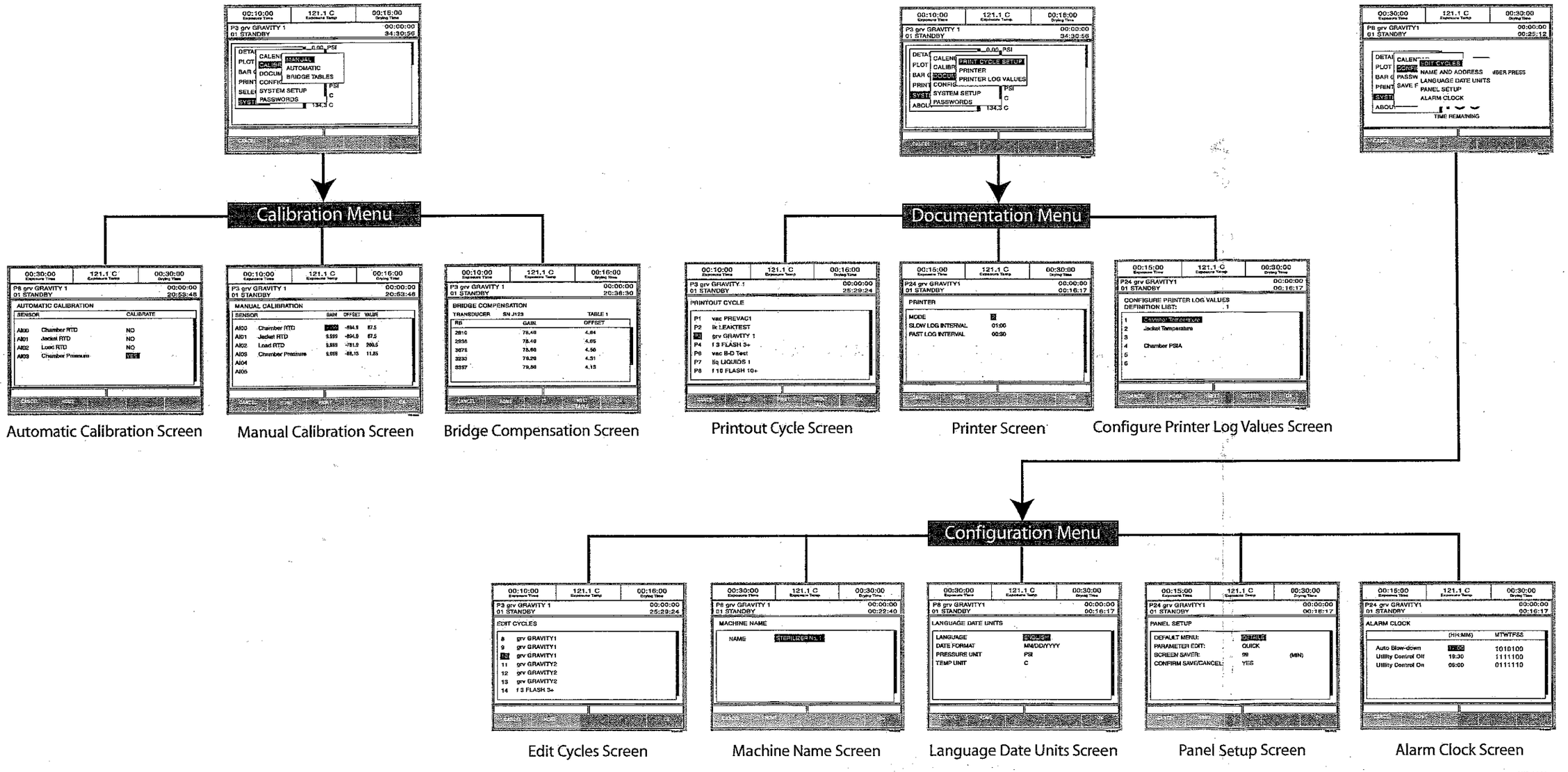
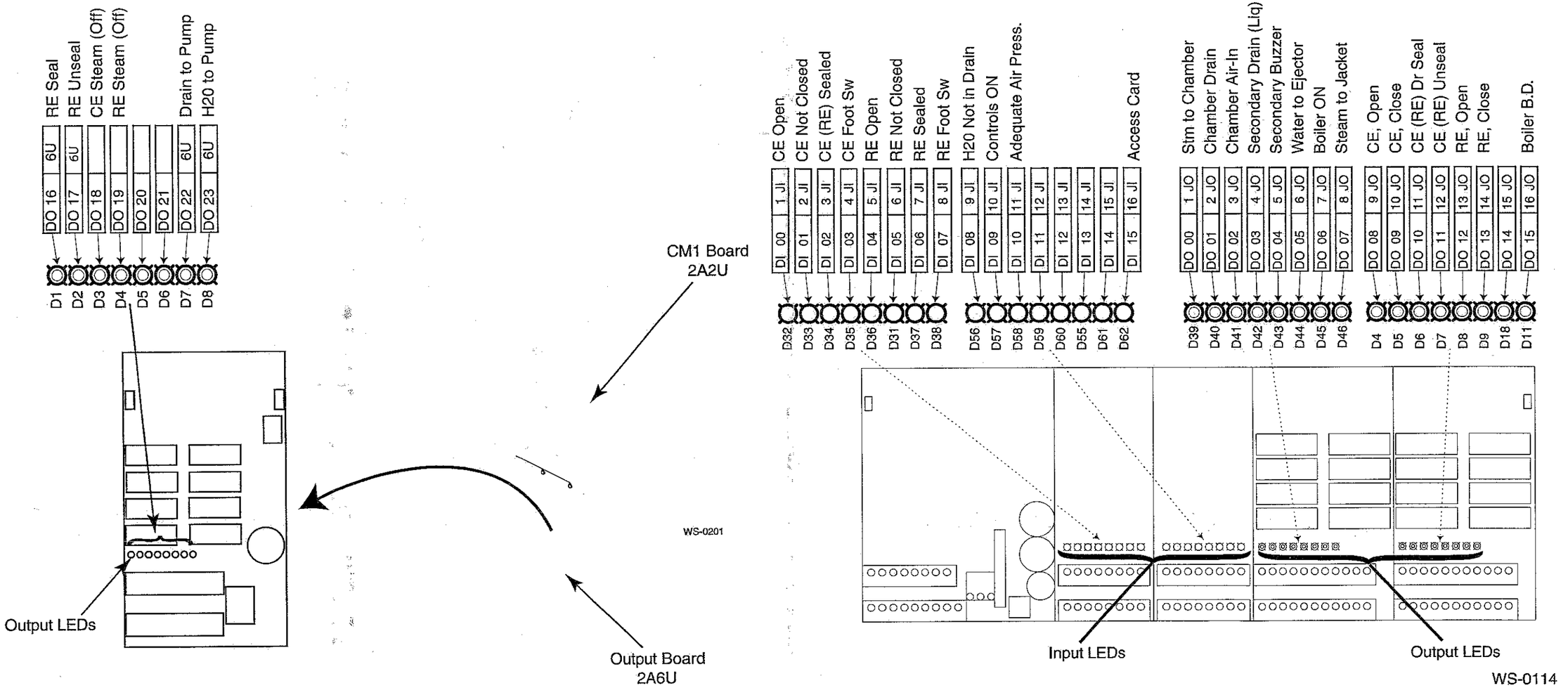
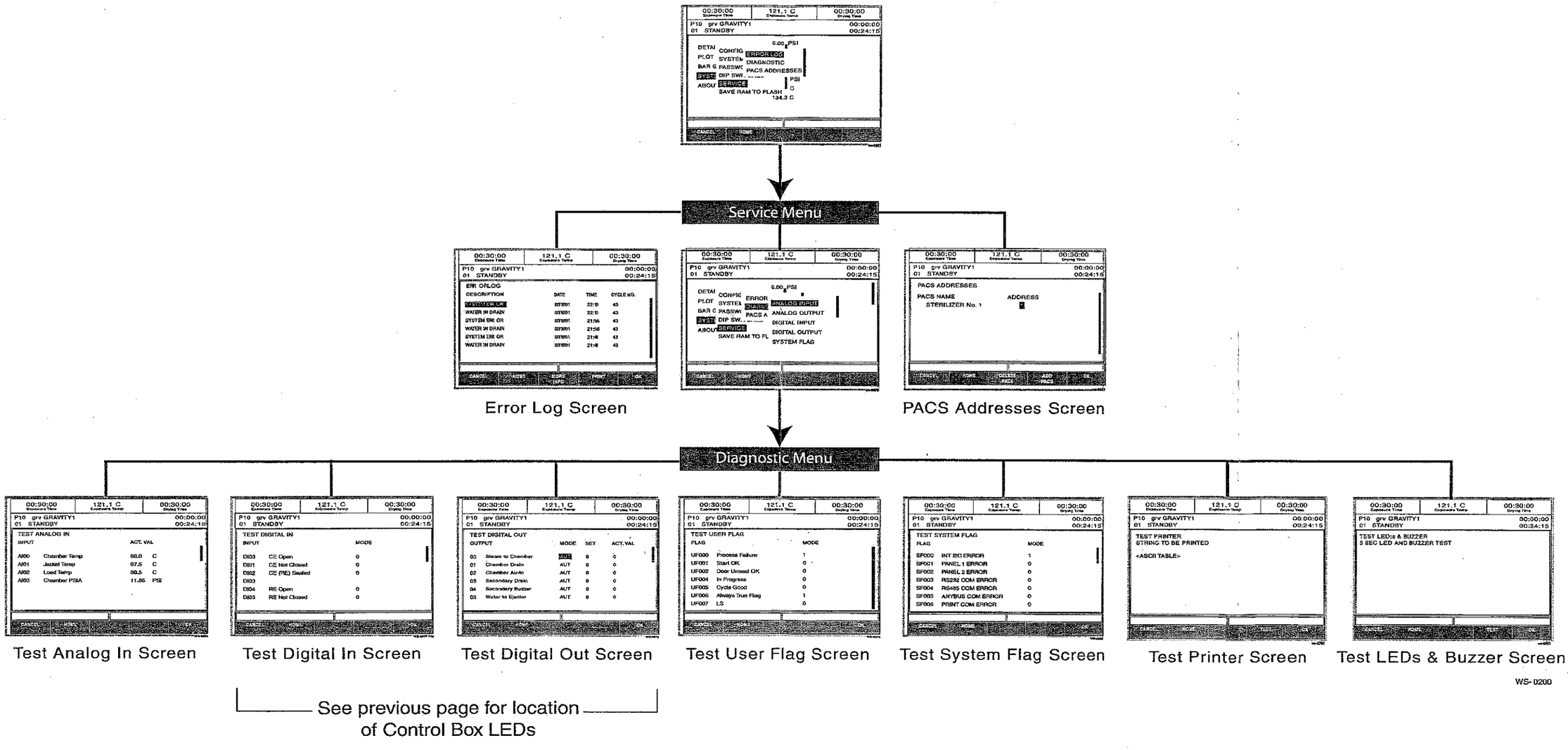

Main Screen
Quick Edit
Full Edit
Select Cycle Screen
Quick Edit Screen
View Parameters Screen
Setup Menu
Details Screen
Plot Graph Screen
Bar Graph Screen
About Screen
System Menu
Calendar Screen
Passwords Screen
DIP Switches Screen
Save RAM to Flash Screen
Calibration Menu
Documentation Menu
Configuration Menu
Service Menu
See Sheet 2
See Sheet 3
WS-0198


Calibration Menu
Documentation Menu
Configuration Menu
Automatic Calibration Screen
Manual Calibration Screen
Bridge Compensation Screen
Printout Cycle Screen
Printer Screen
Configure Printer Log Values Screen
Edit Cycles Screen
Machine Name Screen
Language Date Units Screen
Panel Setup Screen
Alarm Clock Screen
WS-0199


RE Seal
RE Unseal
CE Steam (Off)
RE Steam (Off)
Drain to Pump
H20 to Pump
DO 16 6U
DO 17 6U
DO 18
DO 19
DO 20
DO 21
DO 22 6U
DO 23 6U
D1 D2 D3 D4 D5 D6 D7 D8
CM1 Board
2A2U
WS-0201
Output LEDs
Output Board
2A6U
CE Open
CE Not Closed
CE (RE) Sealed
CE Foot Sw
RE Open
RE Not Closed
RE Sealed
RE Foot Sw
H20 Not in Drain
Controls ON
Adequate Air Press.
Access Card
DI 00 1 JI
DI 01 2 JI
DI 02 3 JI
DI 03 4 JI
DI 04 5 JI
DI 05 6 JI
DI 06 7 JI
DI 07 8 JI
DI 08 9 JI
DI 09 10 JI
DI 10 11 JI
DI 11 12 JI
DI 12 13 JI
DI 13 14 JI
DI 14 15 JI
DI 15 16 JI
D32 D33 D34 D35 D36 D31 D37 D38 D56 D57 D58 D59 D60 D55 D61 D62
Stm to Chamber
Chamber Drain
Chamber Air-In
Secondary Drain (Liq)
Secondary Buzzer
Water to Ejector
Boiler ON
Steam to Jacket
DO 00 1 JO
DO 01 2 JO
DO 02 3 JO
DO 03 4 JO
DO 04 5 JO
DO 05 6 JO
DO 06 7 JO
DO 07 8 JO
D39 D40 D41 D42 D43 D44 D45 D46
CE, Open
CE, Close
CE (RE) Dr Seal
CE (RE) Unseal
RE, Open
RE, Close
Boiler B.D.
DO 08 9 JO
DO 09 10 JO
DO 10 11 JO
DO 11 12 JO
DO 12 13 JO
DO 13 14 JO
DO 14 15 JO
DO 15 16 JO
D4 D5 D6 D7 D8 D9 D18 D11
Input LEDs
Output LEDs
WS-0114


Service Menu
Error Log Screen
PACS Addresses Screen
Diagnostic Menu
Test Analog In Screen
Test Digital In Screen
Test Digital Out Screen
Test User Flag Screen
Test System Flag Screen
Test Printer Screen
Test LEDs & Buzzer Screen
WS- 0200
See previous page for location of Control Box LEDs

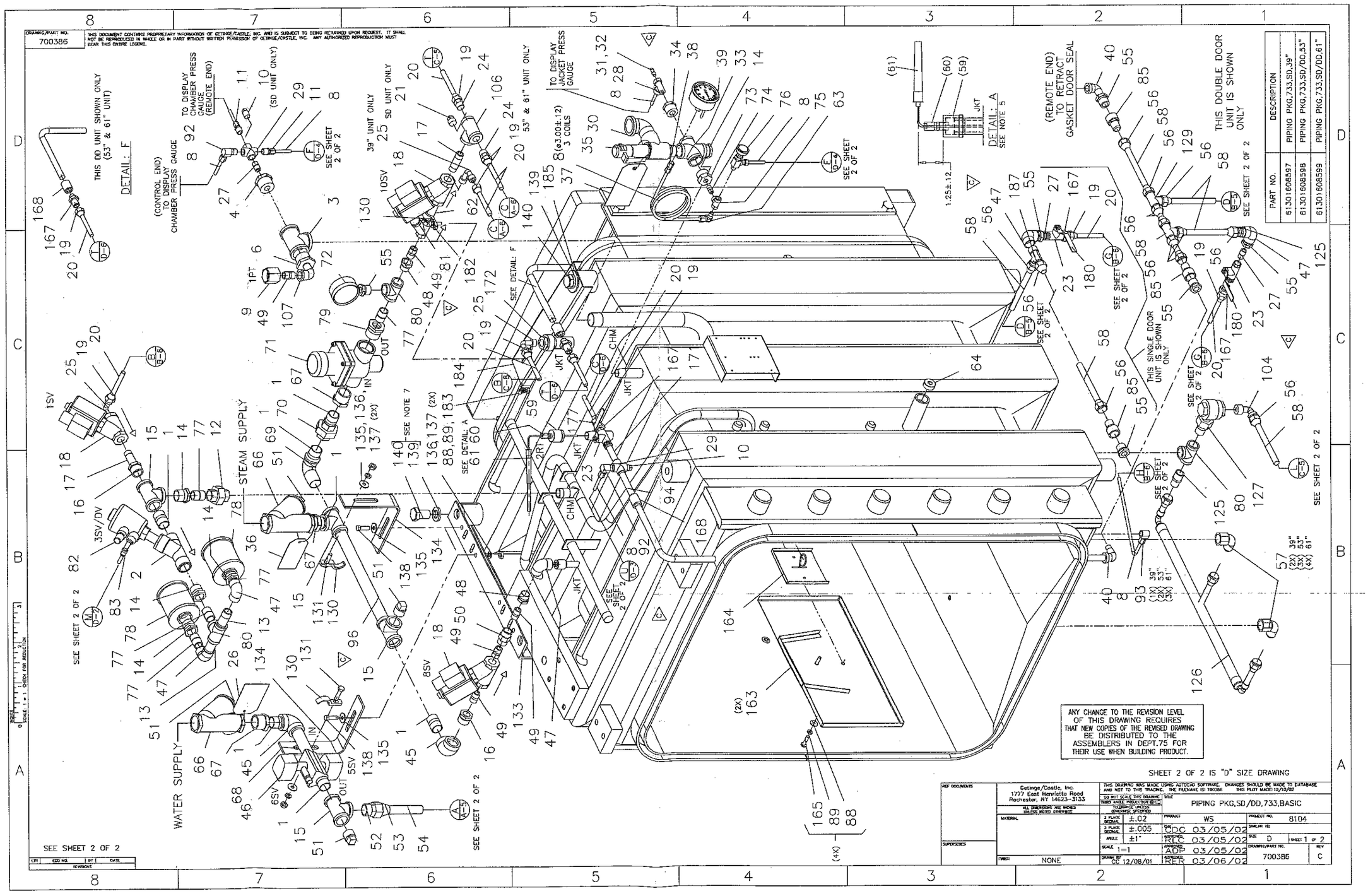
Section 8 Piping Schematics

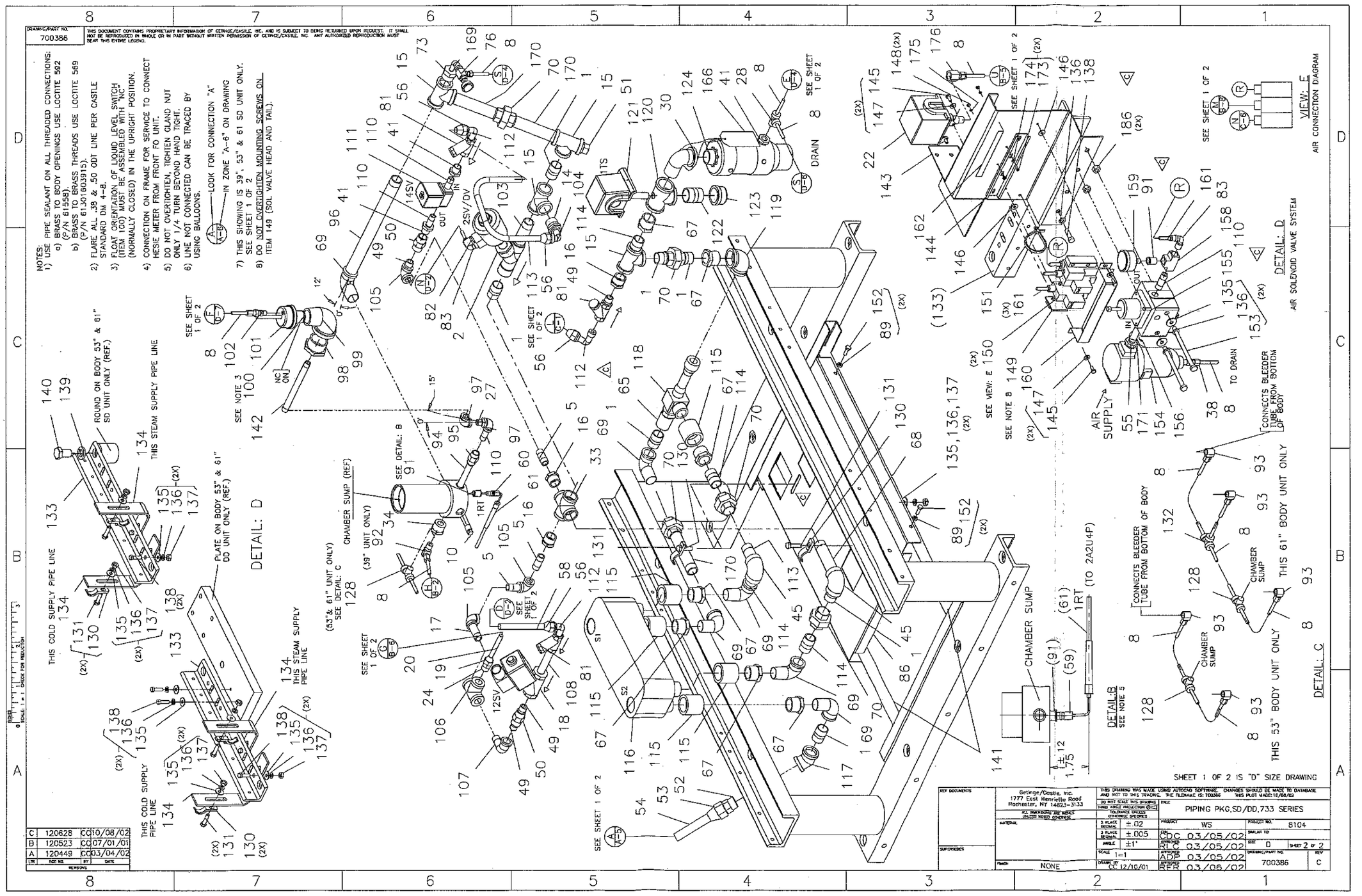
NUMBER	TITLE	DRAWING NUMBER	PAGE
8–1	PIPING PACKAGE, BASIC, 733 LS/HC	700386	8–2
8–2	INSTRUMENTATION DRAWING 733 LS/HC WITH EJECTOR VACUUM	PI0018	8–5
8–3	PIPING PACKAGE, VACUUM PUMP, 733LS	A09013	8–6
8–4	INSTRUMENTATION DRAWING, 733LS WITH VACUUM PUMP	PI0019	8–7
8–5	PROCESS PHASE DIAGRAM, 733LS	PP0011	8–8
8–6	PROCESS PHASE DIAGRAM, 733HC	PP0012	8–12
8–7	WATER SAVER PACKAGE		8–15

Axxxxx = 613016xxxxx

Refer to 700 Series Parts Catalog (Pub. No. 61301608215) for the part numbers of items called out on the assembly drawings.

Figure 8–1. PIPING PACKAGE, BASIC, 733 LS/HC (sheet 1 of 2)


DRAWING/PART NO. 700386
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF GETINGE/CASTLE, INC. AND IS SUBJECT TO BEING RETURNED UPON REQUEST. IT SHALL NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION OF GETINGE/CASTLE, INC. ANY AUTHORIZED REPRODUCTION MUST BEAR THIS ENTIRE LEGEND.
THIS DD UNIT SHOWN ONLY (53" & 61" UNIT)
DETAIL: F
(CONTROL END) TO DISPLAY CHAMBER PRESS GAUGE
TO DISPLAY CHAMBER PRESS GAUGE (REMOTE END)
(SD UNIT ONLY)
39" UNIT ONLY
SD UNIT ONLY
TO DISPLAY JACKET PRESS GAUGE
53" & 61" UNIT ONLY
(3.00±.12) 3 COILS
1.25±.12
DETAIL: A
SEE NOTE 5
(REMOTE END) TO RETRACT GASKET DOOR SEAL
THIS DOUBLE DOOR UNIT IS SHOWN ONLY
THIS SINGLE DOOR UNIT IS SHOWN ONLY
SEE SHEET 2 OF 2
PART NO. | DESCRIPTION
61301608597 | PIPING PKG,733,SD,39"
61301608598 | PIPING PKG,733,SD/DD,53"
61301608599 | PIPING PKG,733,SD/DD,61"
1SV
3SV/DV
5SV
8SV
10SV
STEAM SUPPLY
WATER SUPPLY
IN
OUT
SEE NOTE 7
SEE DETAIL A
SEE DETAIL F
JKT
CHM
2R1
ANY CHANGE TO THE REVISION LEVEL OF THIS DRAWING REQUIRES THAT NEW COPIES OF THE REVISED DRAWING BE DISTRIBUTED TO THE ASSEMBLERS IN DEPT.75 FOR THEIR USE WHEN BUILDING PRODUCT.
SHEET 2 OF 2 IS "D" SIZE DRAWING
REF DOCUMENTS
SUPERSEDES
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
THIS DRAWING WAS MADE USING AUTOCAD SOFTWARE. CHANGES SHOULD BE MADE TO DATABASE AND NOT TO THIS TRACING. THE FILENAME IS 700386
DO NOT SCALE THIS DRAWING
THIRD ANGLE PROJECTION
TOLERANCE UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE INCHES UNLESS NOTED OTHERWISE
MATERIAL
FINISH NONE
TITLE PIPING PKG,SD/DD,733,BASIC
2 PLACE DECIMAL ±.02
3 PLACE DECIMAL ±.005
ANGLE ±1°
SCALE 1=1
DRAWN BY CC 12/06/01
PRODUCT WS
PROJECT NO. 8104
ENGR CDC 03/05/02
SIMILAR TO
MFG RLC 03/05/02
SIZE D
SHEET 1 OF 2
APPROVED ADP 03/05/02
DRAWING/PART NO. 700386
REV C
APPROVED RER 03/06/02
REVISIONS
LTR ECO NO. BY DATE


DRAWING/PART NO. 700386
NOTES:
1) USE PIPE SEALANT ON ALL THREADED CONNECTIONS:
a) BRASS TO BODY OPENINGS USE LOCTITE 592 (P/N 81558).
b) BRASS TO BRASS THREADS USE LOCTITE 569 (P/N 61301603915).
2) FLARE ALL .38 & .50 ODT LINE PER CASTLE STANDARD DM 4-8.
3) FLOAT ORIENTATION OF LIQUID LEVEL SWITCH (ITEM 100) MUST BE ASSEMBLED WITH "NC" (NORMALLY CLOSED) IN THE UPRIGHT POSITION.
4) CONNECTION ON FRAME FOR SERVICE TO CONNECT HESIE METER FROM FRONT FO UNIT.
5) DO NOT OVERTIGHTEN, TIGHTEN GLAND NUT ONLY 1/4 TURN BEYOND HAND TIGHT.
6) LINE NOT CONNECTED CAN BE TRACED BY USING BALLOONS.
7) THIS SHOWING IS 39", 53" & 61 SD UNIT ONLY. SEE SHEET 1 OF 2.
8) DO NOT OVERTIGHTEN MOUNTING SCREWS ON ITEM 149 (SOL VALVE HEAD AND TAIL).
DETAIL: D
DETAIL: C
DETAIL: B
DETAIL: D
VIEW: E
AIR CONNECTION DIAGRAM
AIR SOLENOID VALVE SYSTEM
THIS COLD SUPPLY PIPE LINE
THIS STEAM SUPPLY PIPE LINE
ROUND ON BODY 53" & 61" SD UNIT ONLY (REF.)
PLATE ON BODY 53" & 61" DD UNIT ONLY (REF.)
CHAMBER SUMP (REF)
(39" UNIT ONLY)
(53"& 61" UNIT ONLY) SEE DETAIL: C
CONNECTS BLEEDER TUBE FROM BOTTOM OF BODY
THIS 61" BODY UNIT ONLY
THIS 53" BODY UNIT ONLY
AIR SUPPLY
TO DRAIN
SEE SHEET 1 OF 2
SEE NOTE 3
SEE NOTE 8
SEE VIEW: E
SHEET 1 OF 2 IS "D" SIZE DRAWING
PIPING PKG,SD/DD,733 SERIES
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
C 120628 CC10/08/02
B 120523 CC07/01/01
A 120449 CC03/04/02

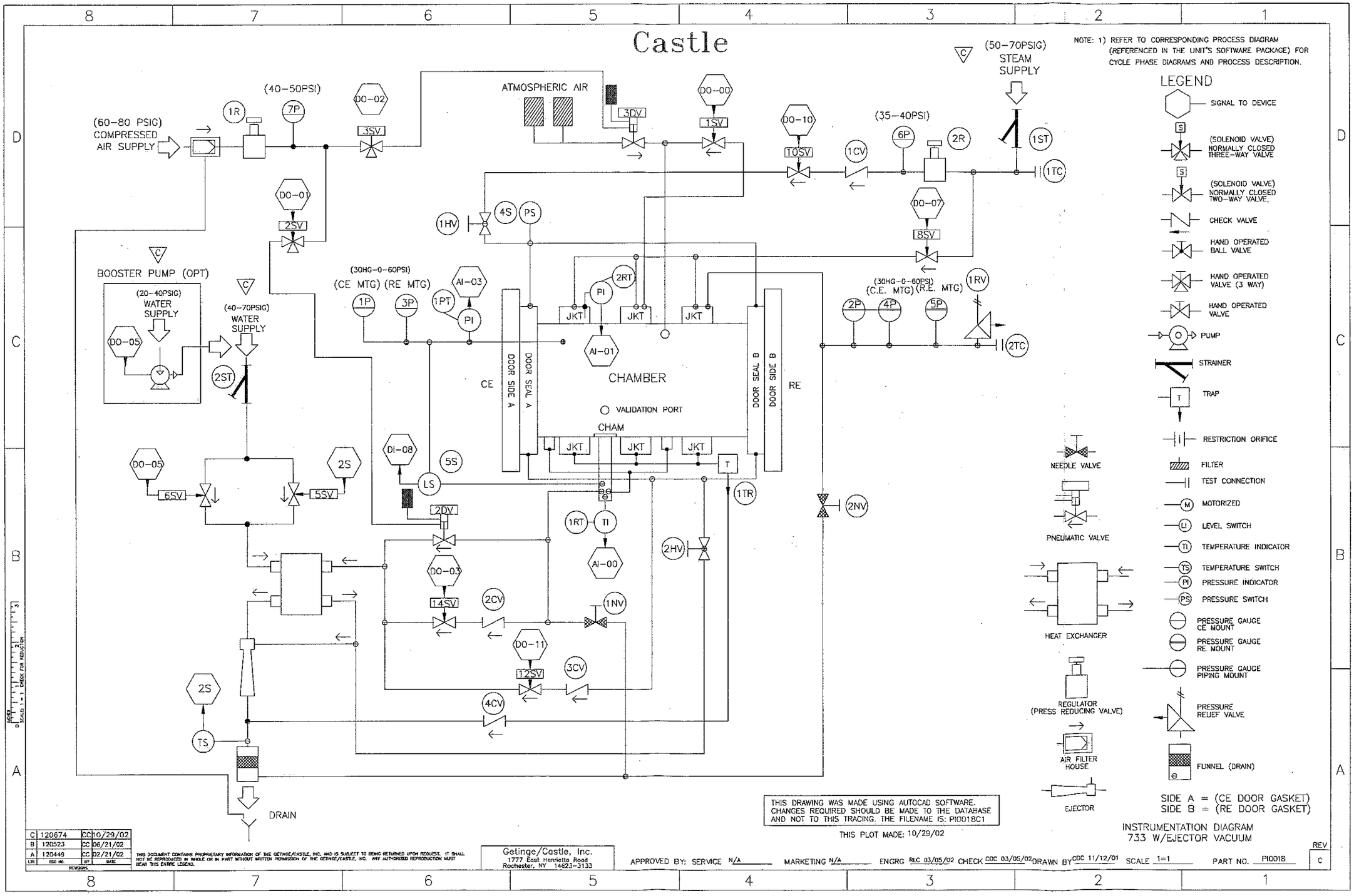
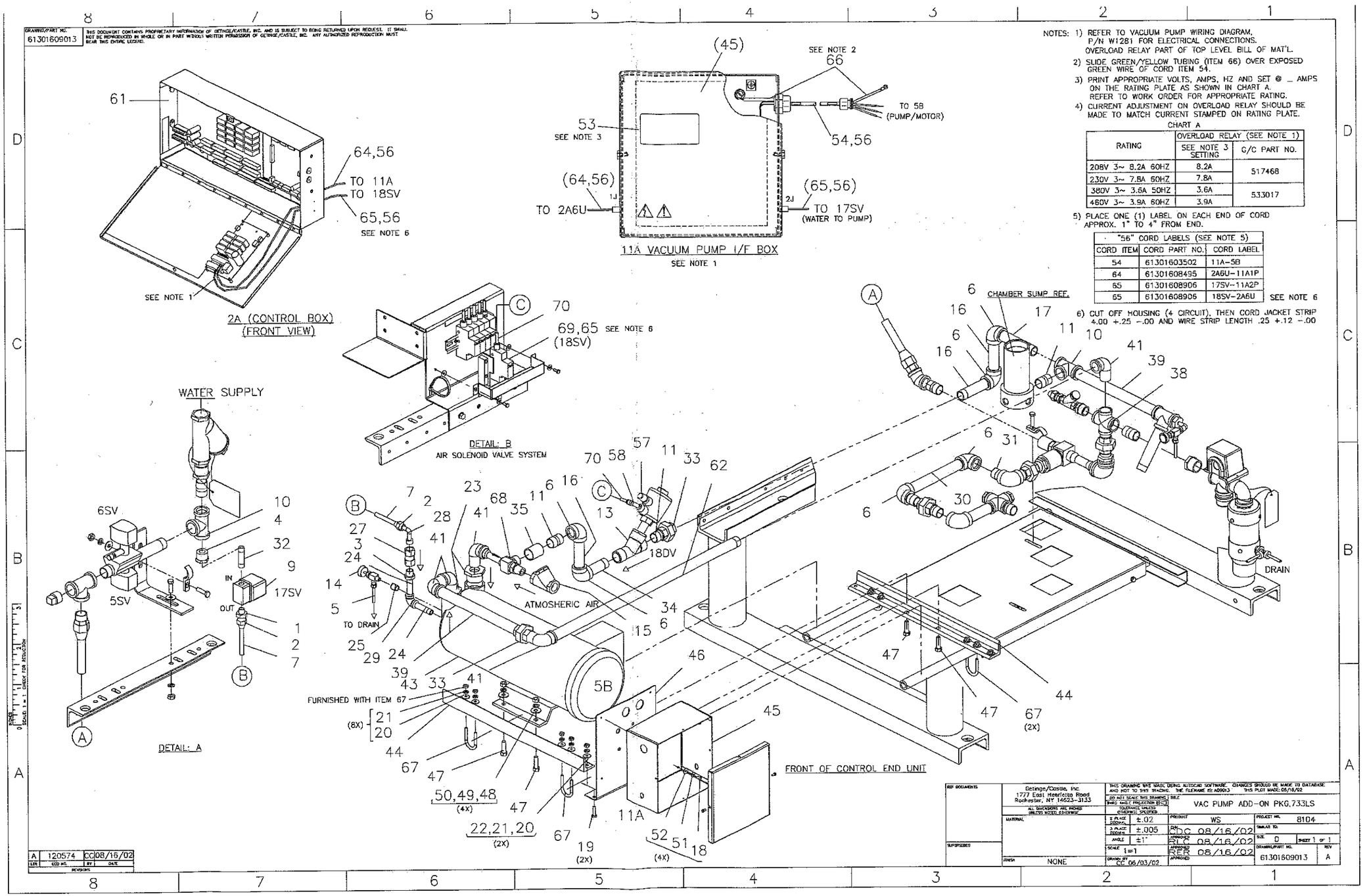

Castle
(60–80 PSIG) COMPRESSED AIR SUPPLY
(40–50PSI)
ATMOSPHERIC AIR
(50–70PSIG) STEAM SUPPLY
(35–40PSI)
BOOSTER PUMP (OPT)
(20–40PSIG) WATER SUPPLY
(40–70PSIG) WATER SUPPLY
(30HG–0–60PSI) (CE MTG) (RE MTG)
(30HG–0–60PSI) (C.E. MTG) (R.E. MTG)
CHAMBER
CE
RE
DOOR SIDE A
DOOR SEAL A
DOOR SEAL B
DOOR SIDE B
VALIDATION PORT
CHAM
JKT
DRAIN
NOTE: 1) REFER TO CORRESPONDING PROCESS DIAGRAM (REFERENCED IN THE UNIT'S SOFTWARE PACKAGE) FOR CYCLE PHASE DIAGRAMS AND PROCESS DESCRIPTION.
LEGEND
SIGNAL TO DEVICE
(SOLENOID VALVE) NORMALLY CLOSED THREE–WAY VALVE
(SOLENOID VALVE) NORMALLY CLOSED TWO–WAY VALVE,
CHECK VALVE
HAND OPERATED BALL VALVE
HAND OPERATED VALVE (3 WAY)
HAND OPERATED VALVE
PUMP
STRAINER
TRAP
RESTRICTION ORIFICE
FILTER
TEST CONNECTION
MOTORIZED
LEVEL SWITCH
TEMPERATURE INDICATOR
TEMPERATURE SWITCH
PRESSURE INDICATOR
PRESSURE SWITCH
PRESSURE GAUGE CE MOUNT
PRESSURE GAUGE RE MOUNT
PRESSURE GAUGE PIPING MOUNT
PRESSURE RELIEF VALVE
FUNNEL (DRAIN)
NEEDLE VALVE
PNEUMATIC VALVE
HEAT EXCHANGER
REGULATOR (PRESS REDUCING VALVE)
AIR FILTER HOUSE
EJECTOR
SIDE A = (CE DOOR GASKET)
SIDE B = (RE DOOR GASKET)
THIS DRAWING WAS MADE USING AUTOCAD SOFTWARE. CHANGES REQUIRED SHOULD BE MADE TO THE DATABASE AND NOT TO THIS TRACING. THE FILENAME IS: PI0018C1
THIS PLOT MADE: 10/29/02
INSTRUMENTATION DIAGRAM 733 W/EJECTOR VACUUM
C 120674 CC 10/29/02
B 120523 CC 06/21/02
A 120449 CC 02/21/02
Getinge/Castle, Inc. 1777 East Henrietta Road Rochester, NY 14623–3133
APPROVED BY: SERVICE N/A MARKETING N/A ENGRG RLC 03/05/02 CHECK CDC 03/05/02 DRAWN BY CDC 11/12/01 SCALE 1=1 PART NO. PI0018 REV C

Figure 8–3. PIPING PACKAGE, VACUUM PUMP, 733LS


61
64,56
TO 11A
TO 18SV
65,56
SEE NOTE 6
SEE NOTE 1
2A (CONTROL BOX)
(FRONT VIEW)
(45)
SEE NOTE 2
66
TO 5B
(PUMP/MOTOR)
53
SEE NOTE 3
54,56
(64,56)
TO 2A6U
(65,56)
TO 17SV
(WATER TO PUMP)
11A VACUUM PUMP I/F BOX
SEE NOTE 1
NOTES: 1) REFER TO VACUUM PUMP WIRING DIAGRAM, P/N W1281 FOR ELECTRICAL CONNECTIONS. OVERLOAD RELAY PART OF TOP LEVEL BILL OF MAT'L.
2) SLIDE GREEN/YELLOW TUBING (ITEM 66) OVER EXPOSED GREEN WIRE OF CORD ITEM 54.
3) PRINT APPROPRIATE VOLTS, AMPS, HZ AND SET @ _ AMPS ON THE RATING PLATE AS SHOWN IN CHART A. REFER TO WORK ORDER FOR APPROPRIATE RATING.
4) CURRENT ADJUSTMENT ON OVERLOAD RELAY SHOULD BE MADE TO MATCH CURRENT STAMPED ON RATING PLATE.
CHART A
RATING | OVERLOAD RELAY (SEE NOTE 1) | SEE NOTE 3 SETTING | G/C PART NO.
208V 3~ 8.2A 60HZ | 8.2A | 517468
230V 3~ 7.8A 60HZ | 7.8A
380V 3~ 3.6A 50HZ | 3.6A | 533017
460V 3~ 3.9A 60HZ | 3.9A
5) PLACE ONE (1) LABEL ON EACH END OF CORD APPROX. 1" TO 4" FROM END.
"56" CORD LABELS (SEE NOTE 5)
CORD ITEM | CORD PART NO. | CORD LABEL
54 | 61301603502 | 11A–5B
64 | 61301608495 | 2A6U–11A1P
65 | 61301608906 | 17SV–11A2P
65 | 61301608905 | 18SV–2A6U
SEE NOTE 6
6) CUT OFF HOUSING (4 CIRCUIT), THEN CORD JACKET STRIP 4.00 +.25 –.00 AND WIRE STRIP LENGTH .25 +.12 –.00
DETAIL: B
AIR SOLENOID VALVE SYSTEM
70
69,65 SEE NOTE 6
(18SV)
WATER SUPPLY
6SV
5SV
IN
OUT
17SV
DETAIL: A
TO DRAIN
ATMOSPHERIC AIR
18DV
FURNISHED WITH ITEM 67
(8X) 21 20
50,49,48 (4X)
22,21,20 (2X)
5B
11A
52 51 18 (4X)
19 (2X)
67 (2X)
CHAMBER SUMP REF.
DRAIN
FRONT OF CONTROL END UNIT
DRAWING/PART NO. 61301609013
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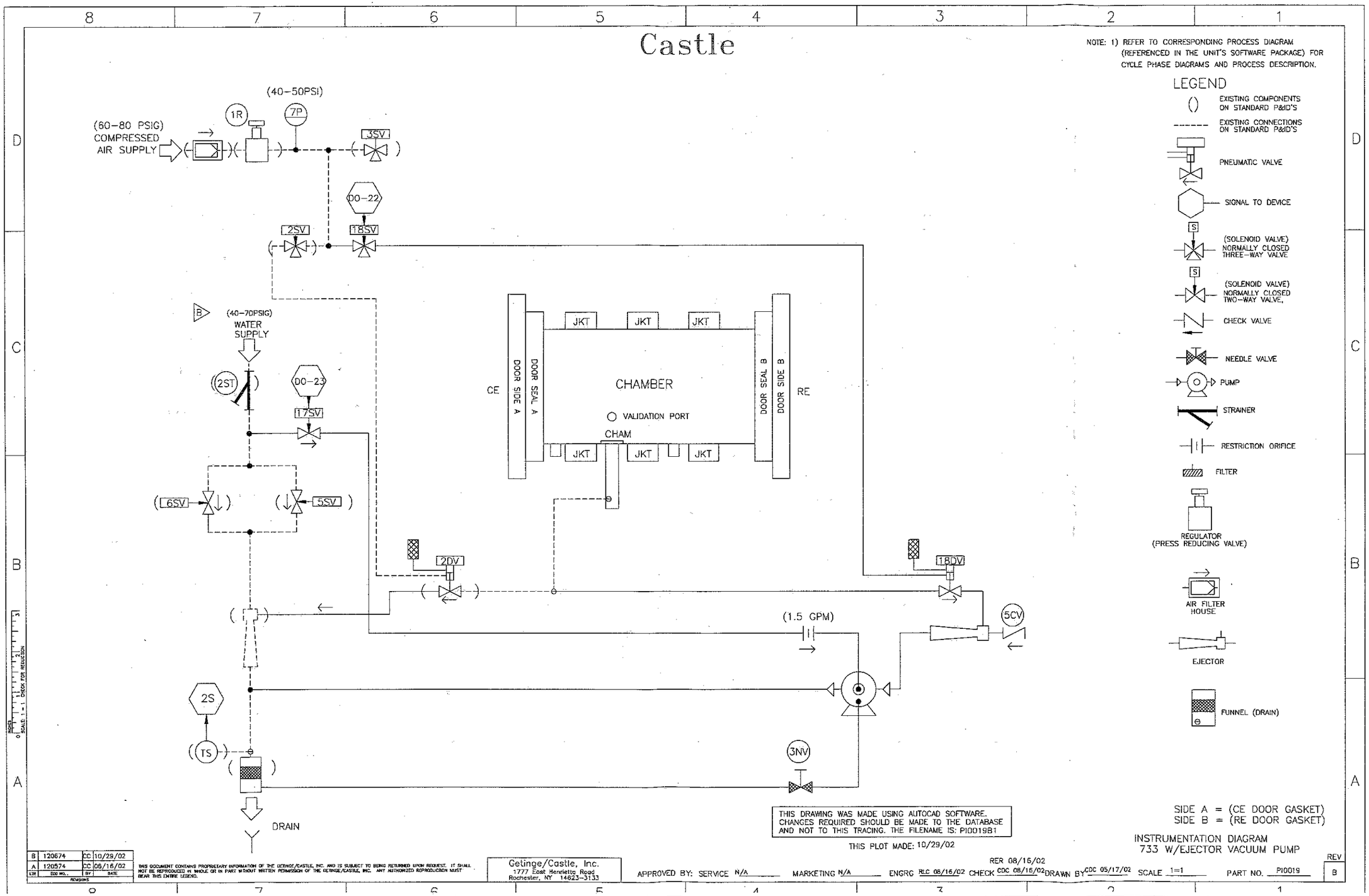
A 120574 CC 08/16/02
REVISIONS
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623–3133
DO NOT SCALE THIS DRAWING
UNLESS OTHERWISE SPECIFIED
TOLERANCE UNLESS OTHERWISE SPECIFIED
MATERIAL
FINISH NONE
SUPERSEDES
REF DOCUMENTS
THIS DRAWING WAS MADE USING AUTOCAD SOFTWARE. CHANGES SHOULD BE MADE TO DATABASE AND NOT TO THIS DRAWING. THE FILENAME IS: ADD03
THIS PLOT MADE: 08/16/02
TITLE VAC PUMP ADD–ON PKG,733LS
PROJECT WS
PROJECT NO. 8104
SIMILAR TO
SIZE D
SHEET 1 OF 1
DRAWING/PART NO. 61301609013
REV A
DRAWN BY CC 06/03/02
APPROVED
1 PLACE DECIMAL ±.02
2 PLACE DECIMAL ±.005
ANGLE ±1°
SCALE 1=1
CC 08/16/02
ADC 08/16/02
ETC 08/16/02
ETR 08/16/02


Castle
NOTE: 1) REFER TO CORRESPONDING PROCESS DIAGRAM (REFERENCED IN THE UNIT'S SOFTWARE PACKAGE) FOR CYCLE PHASE DIAGRAMS AND PROCESS DESCRIPTION.
LEGEND
EXISTING COMPONENTS ON STANDARD P&ID'S
EXISTING CONNECTIONS ON STANDARD P&ID'S
PNEUMATIC VALVE
SIGNAL TO DEVICE
(SOLENOID VALVE) NORMALLY CLOSED THREE-WAY VALVE
(SOLENOID VALVE) NORMALLY CLOSED TWO-WAY VALVE,
CHECK VALVE
NEEDLE VALVE
PUMP
STRAINER
RESTRICTION ORIFICE
FILTER
REGULATOR (PRESS REDUCING VALVE)
AIR FILTER HOUSE
EJECTOR
FUNNEL (DRAIN)
(40-50PSI)
(60-80 PSIG) COMPRESSED AIR SUPPLY
1R
7P
3SV
DO-22
2SV
18SV
(40-70PSIG) WATER SUPPLY
2ST
DO-23
17SV
16SV
15SV
CHAMBER
VALIDATION PORT
CHAM
JKT
DOOR SIDE A
DOOR SEAL A
DOOR SEAL B
DOOR SIDE B
CE
RE
20V
18DV
(1.5 GPM)
5CV
2S
TS
3NV
DRAIN
THIS DRAWING WAS MADE USING AUTOCAD SOFTWARE. CHANGES REQUIRED SHOULD BE MADE TO THE DATABASE AND NOT TO THIS TRACING. THE FILENAME IS: P10019B1
THIS PLOT MADE: 10/29/02
SIDE A = (CE DOOR GASKET)
SIDE B = (RE DOOR GASKET)
INSTRUMENTATION DIAGRAM
733 W/EJECTOR VACUUM PUMP
B 120674 CC 10/29/02
A 120574 CC 06/16/02
REVISIONS
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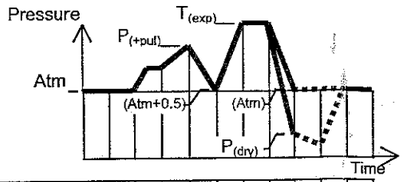
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
APPROVED BY: SERVICE N/A MARKETING N/A
ENGRG RLC 08/16/02 CHECK CDC 08/15/02 RER 08/16/02
DRAWN BY CDC 05/17/02
SCALE 1=1
PART NO. P10019
REV B

Figure 8–5. PROCESS PHASE DIAGRAM, 733LS (sheet 1 of 4)

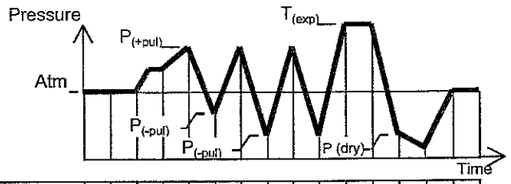
Getinge/Castle, Inc.	Doc. Name: **Process Diagram, 733LS**		Doc. No.: **PP0011**	Rev.: **A**
1777 East Henrietta Road	Created By: SEB 7/03/02	File Name: PP0011 Rev A Page 1-3.xls	Product: 733LS	Latest ECO: 120590
Rochester, NY 14623-3133	Approved: SEB 7/03/02	File Type: MS Excel 97	Class Code: 8104	Page: 1 of 5

grv GRAVITY1 Cycle



Steam to Chambe	1SV	DO00			X	R		C	C				
Chamber Drair	2SV	DO01	D	X	X		R			R	X		D
Chamber Air-In	3SV	DO02	D	X							S	R	D
Secondary Drair	14SV	DO03						X	X	X	X	X	
Water to Ejector	6SV	DO05			C		X			X	X		D
Steam to Jacke	8SV	DO07	C	C	C	C	C	C	C	C	C	C	C
CE & RE Door Sea	10SV	DO10	D	X	X	X	X	X	X	X	X	X	D
CE & RE Door Unsea	12SV	DO11	D										D
Cycle Phase No.:			PH0000	PH0500	PH1100	PH1200	PH1800	PH2000	PH3100	PH3110	PH3800	PH4000	

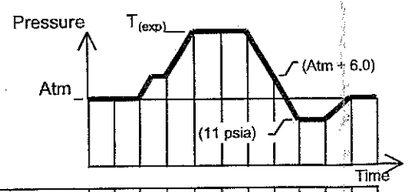
vac PREVAC 1 Cycle
with Ejector only



Steam to Chambe	1SV	DO00			X	R		R		R		C	C				
Chamber Drair	2SV	DO01	D	X	X		R		R		R			R	X		D
Chamber Air-In	3SV	DO02	D	X												R	D
Secondary Drair	14SV	DO03										X	X	X	X	X	
Water to Ejector	6SV	DO05			C		X		X		X			X	X		D
Steam to Jacke	8SV	DO07	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
CE & RE Door Sea	10SV	DO10	D	X	X	X	X	X	X	X	X	X	X	X	X	X	D
CE & RE Door Unsea	12SV	DO11	D														D
Cycle Phase No.:			PH0000	PH0500	PH1100	PH1200	PH1200	PH1200	PH1800	PH2000	PH3100	PH3110	PH3800	PH4000			

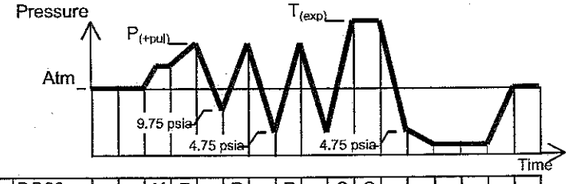
NOTES: 1) Refer to pg 3 for charts, keys & other notes
2) Refer to pg 4-5 for cycle phase descriptions

liq LIQUIDS 1 Cycle



Steam to Chambe	1SV	DO00			X	C	C	C					
Chamber Drair	2SV	DO01	D	X	X				R	R			D
Chamber Air-In	3SV	DO02	D	X								R	D
Secondary Drair	14SV	DO03				X	X	X				X	
Water to Ejector	6SV	DO05			C					X			D
Steam to Jacke	8SV	DO07	C	C	C	C	C	C					
CE & RE Door Sea	10SV	DO10	D	X	X	X	X	X	X	X		X	D
CE & RE Door Unsea	12SV	DO11	D										D
Cycle Phase No.:			PH0000	PH0500	PH1100	PH1890	PH1990	PH2090	PH3190			PH3800	PH4000

lkt LEAK TEST Cycle
with Ejector only



Steam to Chambe	1SV	DO00			X	R		R		R		C	C				
Chamber Drair	2SV	DO01	D	X	X		R		R		R			R	X		D
Chamber Air-In	3SV	DO02	D	X												R	D
Secondary Drair	14SV	DO03										X	X	X	X	X	
Water to Ejector	6SV	DO05			C		X		X		X			X	X		D
Steam to Jacke	8SV	DO07	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
CE & RE Door Sea	10SV	DO10	D	X	X	X	X	X	X	X	X	X	X	X	X	X	D
CE & RE Door Unsea	12SV	DO11	D														D
Cycle Phase No.:			PH0000	PH0500	PH1100	PH1200	PH1200	PH1200	PH1800	PH2000	PH3100	PH3110	PH3700	PH3710	PH3800	PH4000	

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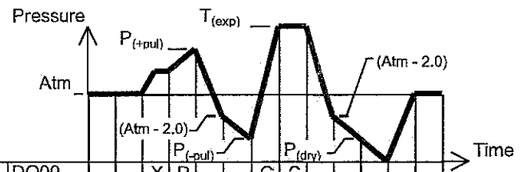
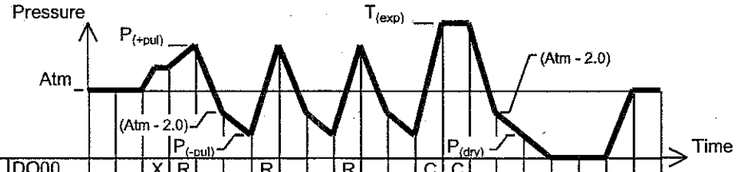
			Page: 2 of 5

vac PREVAC 1 Cycle
with Vacuum Pump



Steam to Chamber	1SV	DO00			X	R			C	C					
Chamber Drain	2SV	DO01	D	X	X		R				R				D
Chamber Air-In	3SV	DO02	D	X										R	D
Secondary Drain	14SV	DO03							X	X	X	X	X	X	
Water to Ejector	6SV	DO05			C		X				X				D
Steam to Jacket	8SV	DO07	C	C	C	C	C	C	C	C	C	C	C	C	C
Drain to Vac Pmp	18SV	DO22						R				R	X		
Vent to Vac Pmp	19SV	DO22	X	X	X	X	X	R	X	X	X	R		X	X
Vac Pmp & Water	5B/17SV	DO23						X				X	X		
CE & RE Door Seal	10SV	DO10	D	X	X	X	X	X	X	X	X	X	X	X	D
CE & RE Door Unseal	12SV	DO12	D												D
Cycle Phase No.:			PH0000	PH0500	PH1100		PH1200		PH1800	PH2000		PH3100		PH3800	PH4000

Leak Test (lkt) Cycle
with Vacuum Pump



Steam to Chamber	1SV	DO00			X	R			R			R			C	C							
Chamber Drain	2SV	DO01	D	X	X		R			R			R				R						D
Chamber Air-In	3SV	DO02	D	X																		R	D
Secondary Drain	14SV	DO03													X	X	X	X	X	X	X	X	
Water to Ejector	6SV	DO05			C		X			X			X				X						D
Steam to Jacket	8SV	DO07	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Drain to Vac Pmp	18SV	DO22						R			R			R				R	X				
Vent to Vac Pmp	19SV	DO22	X	X	X	X	X	R	X	X	R	X	X	R	X	X	X	R		X	X	X	X
Vac Pmp & Water	5B/17SV	DO23						X			X			X				X	X				
CE & RE Door Seal	10SV	DO10	D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	D
CE & RE Door Unseal	12SV	DO12	D																				D
Cycle Phase No.:			PH0000	PH0500	PH1100		PH1200			PH1200			PH1200		PH1800	PH2000		PH3100		PH3110	PH3700	PH3710	PH3800	PH4000

NOTES:
1) Refer to pg 3 for charts, keys & other notes.
2) Refer to pg 4-5 for cycle phase descriptions.

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Figure 8–5. PROCESS PHASE DIAGRAM, 733LS (sheet 3 of 4)

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			Page: 3 of 5

FACTORY SETTINGS

Cycle			Purge	Conditioning Pulses			Exposure		Drying		
No.	Type	Name	Time (min.)	Qty.	P(+pul) (PSIA)	P(-pul) (PSIA)**	T(exp) °C (°F)	Time (min.)	Type	P(dry) (PSIA)	Time (min.)
P1	vac	PREVAC 1	2	3	30	9.75/4.75	121.1 250.0	30	vac	4.75	15:00
P2	vac	PREVAC 1	2	3	30	9.75/4.75	121.1 250.0	30	vac	4.75	15:00
P3	vac	PREVAC 1	2	3	30	9.75/4.75	121.1 250.0	30	vac	4.75	15:00
P4	vac	PREVAC 1	2	3	30	9.75/4.75	121.1 250.0	30	vac	4.75	15:00
P5	vac	PREVAC 1	2	3	30	9.75/4.75	121.1 250.0	30	vac	4.75	15:00
P6	vac	PREVAC 1	2	3	30	9.75/4.75	121.1 250.0	30	vac	4.75	15:00
P7	grv	GRAVITY 1	2	5	30	atm + 0.5	121.1 250.0	30	grv	atm	15:00
P8	grv	GRAVITY 1	2	5	30	atm + 0.5	121.1 250.0	30	grv	atm	15:00
P9	grv	GRAVITY 1	2	5	30	atm + 0.5	121.1 250.0	30	grv	atm	15:00
P10	grv	GRAVITY 1	2	5	30	atm + 0.5	121.1 250.0	30	grv	atm	15:00
P11	grv	GRAVITY 1	2	5	30	atm + 0.5	121.1 250.0	30	grv	atm	15:00
P12	grv	GRAVITY 1	2	5	30	atm + 0.5	121.1 250.0	30	grv	atm	15:00
P13	liq	LIQUIDS 1	2	n/a	n/a	n/a	121.1 250.0	30	n/a	n/a	n/a
P14	liq	LIQUIDS 1	2	n/a	n/a	n/a	121.1 250.0	30	n/a	n/a	n/a
P15	liq	LIQUIDS 1	2	n/a	n/a	n/a	121.1 250.0	30	n/a	n/a	n/a
P16	liq	LIQUIDS 1	2	n/a	n/a	n/a	121.1 250.0	30	n/a	n/a	n/a
P17	liq	LIQUIDS 1	2	n/a	n/a	n/a	121.1 250.0	30	n/a	n/a	n/a
P18	liq	LIQUIDS 1	2	n/a	n/a	n/a	121.1 250.0	30	n/a	n/a	n/a
P19	lkt	LEAKTEST	2	3	30	9.75/4.75	131.0 268.0	3	vac	4.75	n/a

** Dual values represent: first P(-pul) / subsequent P(-pu

FACTORY RAMP RATE SETTINGS

Cycle Phase		SV No.	Ramp Rate (PSI/Min.)	Comments
No.	Description			
PH1200	Conditioning (Pos	1SV	72.5	Supervisor adjustable
PH1200	Conditioning (Neg	2SV	72.5	Supervisor adjustable
PH1800	Heat Up	1SV	*varying*	non-adjustable
PH1890	Liquid Heat Up	1SV	*varying*	non-adjustable
PH3100	Exhaust	2SV	72.5	Supervisor adj. (same as neg pulse rate
PH3190	Liquid Exhaust	2SV	0.75	Supervisor adjustable
PH3800	Air-In	3SV	72.5	Supervisor adj. (same as pos pulse rate

NOTES:

1) Refer to the corresponding Instrumentation Diagram (referenced in the uni piping package) for piping schematics and hardware reference.
2) Pressure vs. Time cycle phase diagrams are not to scal
3) Drain Cooling (5SV) is activated/controlled by 2S at all times while unit is O
4) Factory Setting for Liquid Dwell Time = 0 minute
5) 1SV, 2SV & 14SV in some phases are controlled with a fixed limit ram rate of 72.5 PSI/min (see Factory Ramp Rate Settings Table). Norma during these phases, the SV's energize fully and are indicated as such the phase diagrams and the Cycle Phase Description:
6) Additional outputs applicable to unidirectional double door unit
   a) "RE Door Seal" (DO16) is controlled as the "CE Door Seal" (DO1(during cycle.
   b) "RE Door Unseal" (DO17) is controlled as the "CE Door Unsea (DO11) during cycle.

LEGEND (for Cycle Phase Diagrams):

[X]	Energized
[ ]	De-energizec
[C]	Controlled (typically by a set poin
[R]	Ramp Rate Controllec
[S]	Energized per selection (e.g. Gravity Dry vs. Vac Dr
[D]	Energized per door statu
SV	Solenoid Valve
DO	Digital Output (Software reference

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Doc. Name: Process Diagram, 733LS Doc. No.: PP0011 Rev.: A

Created By:	SEB	07/03/02	Product:	733LS	Class Code:	8104
Approved By:	SEB	07/03/02	Doc. File Name:	PP0011 Rev A Page 4-5	Latest ECO:	120590
Approved By:			Doc. File Type:	MS Word 97	Page:	4 of 5

Cycle Phase Descriptions:

PH0000 – STANDBY: Jacket temperature control is enabled. Jacket RTD maintains temperature by energizing and de-energizing 8SV. 8SV maintains steam to jacket throughout the cycle unless noted in the phase description. Also throughout the cycle, drain temperature switch 2S maintains the drain temperature below 60°C (140°F) by energizing and de-energizing 5SV (water to drain). If the door is unsealed, 12SV (or 13SV for unidirectional double doors) energizes to vent door gasket. If the door is sealed, 2SV & 3SV are energized to vent the chamber.

PH0500 – CYCLE START: Cycle Start button is pressed, door(s) seals per PH0110/PH0120/PH0130 described below. Once jacket temperature is within +4.4 / -2.2°C (+7.9 / -4°F) of T(exp), the phase is complete.

PH01100 – PURGE: 1SV & 2SV energize. Steam enters the chamber through 1SV and purges chamber of air through 2SV. 6SV energizes if chamber pressure exceeds 2 PSI above atmosphere and de-energizes if pressure falls 1 PSI above atmosphere. Cooling water from 6SV condenses steam at ejector and flows to drain. After a timed period, 1SV, 2SV & 6SV de-energize and the phase is complete.

PH1200 – CONDITIONING: Note: This phase may be repeated based on the quantity of pulses programmed.

- Steam pressurizes chamber through energized 1SV. When chamber pressure reaches P(+pul) (derived from: T(exp) – 2.2°C (or 4.0°F) converted to steam pressure, but no greater than 32.0 PSIA), 1SV de-energizes and 2SV & 6SV energize. Chamber steam is exhausted to ejector, condensed and drained.
- **For Gravity Cycle:** When chamber pressure reaches 0.5 PSI above atmosphere, 2SV & 6SV de-energizes and the phase is complete.
- **For PreVac Cycle w/ ejector only – Negative Pulse 1:** When chamber pressure reaches P(-pul), 2SV & 6SV de-energize and the phase is complete.
- **For PreVac Cycle w/ ejector only – Negative Pulse 2 (& subsequent pulses):** When chamber pressure reaches P(-pul), 2SV & 6SV de-energizes and the phase is complete.
- **For Leak Test w/ ejector:** When chamber pressure reaches 4.75 PSIA, 2SV & 6SV de-energizes and the phase is complete.
- **For PreVac w/ vacuum pump:** When chamber pressure reaches 2.0 PSI below atmosphere, 2SV & 6SV de-energizes. 17SV, 18SV and the vacuum pump motor energize until P(-pul) is reached and the phase is complete. Note: 19SV is a normally open type solenoid valve and will energize/de-energize opposite of 18SV.
- **For Leak Cycle w/ vacuum pump:** When chamber pressure reaches 2.0 PSI below atmosphere, 2SV & 6SV de-energizes. 17SV, 18SV and the vacuum pump motor energize until 4.75 PSIA is reached and the phase is complete. Note: 19SV is a normally open type solenoid valve and will energize/de-energize opposite of 18SV.

PH1800 – HEAT-UP: 1SV & 14SV energizes and steam pressurizes the chamber. As the chamber temperature approaches the programmed exposure temperature, 1SV is controlled (via chamber RTD) to slow down the ascent. When the programmed exposure temperature T(exp) +0.2°C (0.4°F) is reached (sensed by the chamber RTD), the phase is then complete.

PH1890 – LIQUID HEAT-UP: 1SV & 14SV energize and steam pressurizes the chamber. As the chamber temperature approaches the programmed exposure temperature, 1SV is controlled (via chamber RTD) to slow down the ascent. When the programmed exposure temperature T(exp) is reached (sensed by the chamber RTD), the phase is then complete. Note: For cycles utilizing the Liquid RTD, the exposure temperature in this phase is sensed by the Liquid RTD and by the chamber RTD, otherwise it is sensed only by the chamber RTD.

PH1990 – LIQUID DWELL: (Note: This phase is skipped if the Liquid RTD is utilized). 14SV is energized & 1SV is controlled to maintain the selected exposure temperature. After a programmed time period, the phase is complete.

PH2000 – EXPOSURE: The programmed exposure timing begins. 14SV energizes and 1SV is controlled by the chamber RTD to maintain the selected exposure temperature. After the programmed exposure time expires, 1SV & 14SV de-energize and the phase is complete.

PH2090 – LIQUID EXPOSURE: The programmed exposure timing begins. 14SV energizes and 1SV is controlled by the chamber RTD to maintain the selected exposure temperature. For cycles utilizing the liquid RTD, the load temperature is monitored by the liquid RTD to assure proper temperature control. For cycles utilizing an Fo setpoint, the Fo value is computed using the liquid RTD. After the exposure time expires or Fo value is reached, 1SV & 14SV de-energize and the phase is complete.

PH3100 – EXHAUST: 2SV, 6SV, & 14SV energize. Chamber steam is exhausted to ejector, condensed and drained.

- **For Gravity Drying:** When chamber pressure reaches atmosphere, 2SV, 6SV, & 14SV de-energize and the phase is complete.
- **For Vacuum Drying w/ejector only :** When chamber pressure reaches P(dry), 2SV, 6SV, & 14SV de-energize and the phase is complete.
- **For Leak Cycle w/ ejector only:** When chamber pressure reaches 4.75 PSIA, 2SV, 6SV, & 14SV de-energize and the phase is complete.
- **For Vacuum Drying w/ vacuum pump:** When chamber pressure reaches 2.0 PSI below atmosphere, 2SV & 6SV de-energize. 17SV, 18SV and the vacuum pump motor energize until P(dry) is reached and the phase is complete. Note: 19SV is a normally open type solenoid valve and will energize/de-energize opposite of 18SV.
- **For Leak Test Cycle w/ vacuum pump:** When chamber pressure reaches 2.0 PSI below atmosphere, 2SV & 6SV de-energize. 17SV, 18SV and the vacuum pump motor energize until 4.75 PSIA is reached and the phase is complete. Note: 19SV is a normally open type solenoid valve and will energize/de-energize opposite of 18SV.

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Doc. Name: Process Diagram, 733LS Doc. No.: PP0011 Rev.: A

Created By:	SEB	07/03/02	Product:	733LS	Class Code:	8104
Approved By:	SEB	07/03/02	Doc. File Name:	PP0011 Rev A Page 4-5	Latest ECO:	120590
Approved By:			Doc. File Type:	MS Word 97	Page:	5 of 5

PH3190 – LIQUID EXHAUST: 8SV de-energizes. Chamber pressure is decreased at a programmed ramp rate by energizing and de-energizing 2SV. When chamber temperature falls to 100°C (212°F), the exhaust rate is reduced by half the programmed ramp rate. When chamber pressure reaches 6 PSI above atmosphere, 6SV energizes. For cycles not utilizing the Liquid RTD, when chamber pressure falls to 11.00 PSIA, the phase is complete. For cycles utilizing the Liquid RTD, when the liquid load temperature (sensed by the Liquid RTD) cools to 95°C (203°F), the phase is complete.

PH3110 – DRYING: The programmed dry timing begins. For unit with ejector only, 2SV, 6SV & 14SV energize. For unit with vacuum pump, 17SV, 18SV and the vacuum pump motor energize. If Gravity Drying was selected, 3SV also energizes. When the time period elapses, 2SV, 3SV, 6SV, 14SV, 17SV, 18SV and the vacuum pump motor de-energize and the phase is complete. Note: For Leak Test cycle, the time in this phase is fixed at 15 minutes.

PH3700 – EQUALIZATION: 14SV is energized. All other SV's, except for door and jacket control, are de-energized. After a dwell period of 5 minutes, the phase is complete.

PH3710 – LEAK TEST: 14SV is energized. All other SV's, except for door and jacket control, are de-energized. Chamber pressure is initially checked. After 15 minutes, chamber pressure is checked again to determine leak rate and the phase is complete.

PH3800 – AIR-IN: 3SV & 14SV energize and, for Liquid cycles, 8SV remains de-energized. When chamber pressure is within 2 PSI of atmosphere, 3SV & 14SV de-energizes and the phase is complete.

PH4000 – CYCLE COMPLETE: 2SV & 3SV energize and, for Liquid cycles, 8SV remains de-energizes. The cycle complete buzzer sounds for 1 minute or until clear button is pressed. If unit has a single door or standard double door, the door(s) automatically unsealed. If unit has unidirectional double doors, both doors will remain sealed. When either door is opened, the buzzer will turn OFF (if not already OFF) and the phase is complete. Note: 2SV & 3SV de-energizes when door is unsealed (sensed by DI02 and/or DI06).

SEALING DOOR(S):

PH0110 – CE SEALING (Single door or unidirectional double door units): 10SV energizes and 12SV de-energizes. Gasket groove is pressurized, sealing the chamber.

PH0120 – RE SEALING (Unidirectional double door units only): 11SV energizes and 13SV de-energizes. Gasket groove is pressurized, sealing the chamber.

PH0130 – DOORS SEALING (Standard double door units): 10SV energizes and 12SV de-energizes. Gasket groove is pressurized, sealing the chamber.

UNSEALING DOOR(S):

PH0111 – CE UNSEALING (Single door or unidirectional double door units): 10SV remains energized if door was sealed. 3SV, 12SV & 6SV energize. After 4 seconds, 10SV de-energizes. Water to the ejector creates a vacuum in the gasket groove retracting the door gasket. After 30 seconds, 6SV & 3SV de-energizes and the phase is complete.

PH0121 – RE UNSEALING (Unidirectional double door units only): 11SV remains energized. 3SV, 13SV & 6SV energize. After 4 seconds, 11SV de-energizes. Water to the ejector creates a vacuum in the gasket groove retracting the door gasket. After 30 seconds, 6SV & 3SV de-energizes and the phase is complete.

PH0131 – DOORS UNSEALING (Standard double door units): 10SV remains energized. 3SV, 12SV & 6SV energize. After 4 seconds, 10SV de-energizes. Water to the ejector creates a vacuum in the gasket groove retracting the door gasket. After 30 seconds, 6SV & 3SV de-energizes and the phase is complete.

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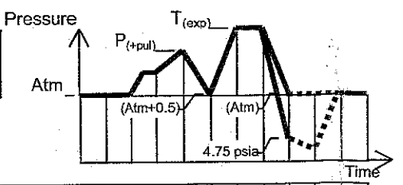
Figure 8–6. PROCESS PHASE DIAGRAM, 733HC (sheet 1 of 3)

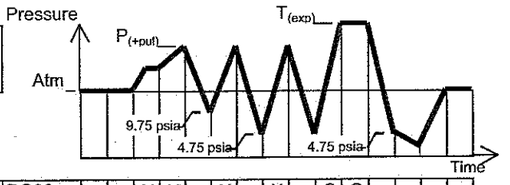
Getinge/Castle, Inc.	Doc. Name: **Process Diagram, 733HC**		Doc. No.: **PP0012**	Rev.: **A**
1777 East Henrietta Road	Created By: SEB 02/01/02	File Name: PD0012 Rev A Page 1-2.xls	Product: 733HC	Latest ECO: 120590
Rochester, NY 14623-3133	Approved: SEB 02/01/02	File Type: MS Excel 97	Class Code: 8104	Page: 1 of 4

grv GRAVITY 1 Cycle	5 pulses
grv GRAVITY 2 Cycle	5 pulses
fls FLASH Cycle	0 pulses



			PH0000	PH0500	PH1100	PH1200	PH1800/1888	PH2000/2088	PH3100	PH3110	PH3800	PH4000
Steam to Chambe	1SV	DO00			X	X		C	C			
Chamber Drair	2SV	DO01	D	X	X		X			X	X	D
Chamber Air-In	3SV	DO02	D	X						S	X	D
Secondary Drair	14SV	DO03					X	X	X	X	X	
Water to Ejector	6SV	DO05			C		X			X	X	D
Steam to Jacke	8SV	DO07	C	C	C	C	C	C	C	C	C	C
CE & RE Door Sea	10SV	DO10	D	X	X	X	X	X	X	X	X	D
CE & RE Door Unsea	12SV	DO11	D									D
Cycle Phase No.:			PH0000	PH0500	PH1100	PH1200	PH1800/1888	PH2000/2088	PH3100	PH3110	PH3800	PH4000

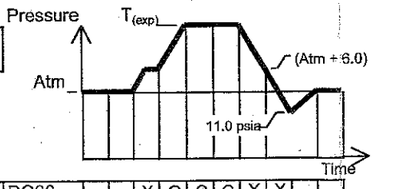
vac PREVAC 1 Cycle	3 pulses
vac PREVAC 2 Cycle	3 pulses
vac B-D TEST Cycle	3 pulses



			PH0000	PH0500	PH1100	PH1200	PH1200	PH1200	PH1800	PH2000	PH3100	PH3110	PH3800	PH4000
Steam to Chambe	1SV	DO00			X	X		X		X	C	C		
Chamber Drair	2SV	DO01	D	X	X		X		X			X	X	D
Chamber Air-In	3SV	DO02	D	X									X	D
Secondary Drair	14SV	DO03								X	X	X	X	
Water to Ejector	6SV	DO05			C		X		X			X	X	D
Steam to Jacke	8SV	DO07	C	C	C	C	C	C	C	C	C	C	C	C
CE & RE Door Sea	10SV	DO10	D	X	X	X	X	X	X	X	X	X	X	D
CE & RE Door Unsea	12SV	DO11	D											D
Cycle Phase No.:			PH0000	PH0500	PH1100	PH1200	PH1200	PH1200	PH1800	PH2000	PH3100	PH3110	PH3800	PH4000

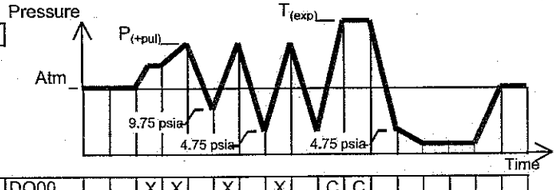
NOTES: 1) Refer to pg 2 for charts, keys & other notes
2) Refer to pg 3 for cycle phase descriptions

liq LIQUIDS 1 Cycle	
liq LIQUIDS 2 Cycle	



			PH0000	PH0500	PH1100	PH1890	PH1990	PH2090	PH3190	PH3800	PH4000
Steam to Chambe	1SV	DO00			X	C	C	C	X	X	
Chamber Drair	2SV	DO01	D	X	X				C	C	D
Chamber Air-In	3SV	DO02	D	X						X	D
Secondary Drair	14SV	DO03				X	X	X		X	
Water to Ejector	6SV	DO05			C				X		D
Steam to Jacke	8SV	DO07	C	C	C	C	C	C			
CE & RE Door Sea	10SV	DO10	D	X	X	X	X	X	X	X	D
CE & RE Door Unsea	12SV	DO11	D								D
Cycle Phase No.:			PH0000	PH0500	PH1100	PH1890	PH1990	PH2090	PH3190	PH3800	PH4000

lkt LEAK TEST Cycle



			PH0000	PH0500	PH1100	PH1200	PH1200	PH1200	PH1800	PH2000	PH3100	PH3110	PH3700	PH3710	PH3800	PH4000
Steam to Chambe	1SV	DO00			X	X		X		X	C	C				
Chamber Drair	2SV	DO01	D	X	X		X		X			X	X			D
Chamber Air-In	3SV	DO02	D	X											X	D
Secondary Drair	14SV	DO03								X	X	X	X	X	X	
Water to Ejector	6SV	DO05			C		X		X			X	X			D
Steam to Jacke	8SV	DO07	C	C	C	C	C	C	C	C	C	C	C	C	C	C
CE & RE Door Sea	10SV	DO10	D	X	X	X	X	X	X	X	X	X	X	X	X	D
CE & RE Door Unsea	12SV	DO11	D													D
Cycle Phase No.:			PH0000	PH0500	PH1100	PH1200	PH1200	PH1200	PH1800	PH2000	PH3100	PH3110	PH3700	PH3710	PH3800	PH4000

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		Page:	2 of 4

FACTORY SETTINGS

Cycle			Exposure		Drying		
No.	Type	Type	T(exp) °F (°C)	Time (min.)	Type	P(dry) (PSIA)	Time (mm:ss)
P1	vac	PREVAC 1	275.0 (135.0)	3	vac	4.75	16:00
P2	vac	PREVAC 1	275.0 (135.0)	3	vac	4.75	16:00
P3	vac	PREVAC 1	275.0 (135.0)	3	vac	4.75	16:00
P4	vac	PREVAC 1	275.0 (135.0)	3	vac	4.75	16:00
P5	vac	PREVAC 1	275.0 (135.0)	3	vac	4.75	16:00
P6	vac	PREVAC 2	275.0 (135.0)	3	vac	4.75	03:00
P7	vac	PREVAC 2	275.0 (135.0)	3	vac	4.75	03:00
P8	vac	PREVAC 2	275.0 (135.0)	3	vac	4.75	03:00
P9	vac	B-D TEST	273.0 (133.9)	3.5	vac	4.75	00:00
P10	grv	GRAVITY 1	250.0 (121.1)	30	grv	atm	30:00
P11	grv	GRAVITY 1	250.0 (121.1)	30	grv	atm	30:00
P12	grv	GRAVITY 1	250.0 (121.1)	30	grv	atm	30:00
P13	grv	GRAVITY 1	250.0 (121.1)	30	grv	atm	30:00
P14	grv	GRAVITY 2	275.0 (135.0)	10	grv	atm	30:00
P15	grv	GRAVITY 2	275.0 (135.0)	10	grv	atm	30:00
P16	grv	GRAVITY 2	275.0 (135.0)	10	grv	atm	30:00
P17	fls	FLASH	275.0 (135.0)	3	vac	4.75	00:30
P18	liq	LIQUIDS 1	250.0 (121.1)	30	n/a	n/a	n/a
P19	liq	LIQUIDS 2	250.0 (121.1)	45	n/a	n/a	n/a
P20	lkt	LEAKTEST	268.0 (131.1)	3	vac	4.75	n/a

FACTORY RAMP RATE SETTINGS

Cycle Phase			Ramp Rate	
No.	Description	SV No.	(PSI/Min.)	Comments
PH1200	Conditioning (Pos	1SV	72.5	non-adjustable
PH1200	Conditioning (Neg	2SV	72.5	non-adjustable
PH1800	Heat Up	1SV, 14SV	*varying*	non-adjustable
PH1890	Liquid Heat Up	1SV, 14SV	*varying*	non-adjustable
PH3100	Exhaust	2SV	72.5	non-adjustable
PH3190	Liquid Exhaust	14SV	0.75	Supervisor adjustable

NOTES:

1) Refer to Instrumentation Diagram PI0018 for piping schematic and hardware references
2) Pressure vs. Time cycle phase diagrams are not to scal
3) Drain Cooling (5SV) is activated/controlled by 2S at all times while unit is O
4) Factory Setting for Liquid Dwell Time = 8 minute
5) 1SV, 2SV & 14SV in some phases are controlled with a fixed limit ramp rate 72.5 PSI/min (see Factory Ramp Rate Settings Table). Normally during the phases, the SV's energize fully and are indicated as such in the phase diagrar and the Cycle Phase Descriptions

LEGEND for Cycle Phase Diagrams:

[X]	Energized
[ ]	De-energizec
[C]	Controllec
[S]	Energized per selection (e.g. Gravity Dry vs. Vac Dr
[D]	Energized per door statu
SV	Solenoid Valv
DO	Digital Output (Software reference

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Approved By:	SEB	2/1/02	Doc. File Name:	PP0012 Rev A Page 3-4	Latest ECO:	120590
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Cycle Phase Descriptions:

PH0000 – STANDBY: Jacket temperature control is enabled. Jacket RTD maintains temperature by energizing and de-energizing 8SV. 8SV maintains steam to jacket throughout the cycle unless noted in the phase description. Also throughout the cycle, drain temperature switch 2S maintains the drain temperature below 60°C (140°F) by energizing and de-energizing 5SV (water to drain). If the door is unsealed, 12SV) energizes to vent door gasket. If the door is sealed, 2SV & 3SV are energized to vent the chamber.

PH0500 – CYCLE START: Cycle Start button is pressed, door(s) seals per PH0110/PH0130 described below. Once jacket temperature is within +4.4 / -2.2°C (+7.9 / -4°F) of T(exp), the phase is complete.

PH1100 – PURGE: 1SV & 2SV energize. Steam enters the chamber through 1SV and purges chamber of air through 2SV. 6SV energizes if chamber pressure exceeds 2 PSI above atmosphere and de-energizes if pressure falls 1 PSI above atmosphere. Cooling water from 6SV condenses steam at ejector and flows to drain. After 180 seconds (for Flash Cycles) or 120 seconds (for non-Flash Cycles), 1SV, 2SV & 6SV de-energize and the phase is complete.

PH1200 – CONDITIONING: Note: This phase may be repeated based on the quantity of pulses programmed.

- Steam pressurizes chamber through energized 1SV. When chamber pressure reaches P(+pul) (T(exp) – 2.2°C (or 4.0°F) converted to steam pressure, but no greater than 32.0 PSIA), 1SV de-energizes and 2SV & 6SV energize. Chamber steam is exhausted to ejector, condensed and drained.
- **For Gravity or Flash Cycles:** When chamber pressure reaches 0.5 PSI above atmosphere, 2SV & 6SV de-energizes and the phase is complete.
- **For PreVac, B-D TEST or LEAK TEST Cycles – 1st Pulse only:** When chamber pressure reaches 9.75 PSIA, 2SV & 6SV de-energizes and the phase is complete.
- **For PreVac, B-D TEST or LEAK TEST Cycles – 2nd & 3rd Pulses only:** When chamber pressure reaches 4.75 PSIA, 2SV & 6SV de-energizes and the phase is complete.

PH1800 or PH1888 (Flash Cycles only) – HEAT-UP: 1SV & 14SV energize and steam pressurizes the chamber. As the chamber temperature approaches the programmed exposure temperature, 1SV is controlled (via chamber RTD) to slow down the ascent. When the programmed exposure temperature T(exp) +0.2°C (0.4°F) is reached (sensed by the chamber RTD), the phase is then complete. Note: PH1888 (used for Flash Cycles) incorporates a quicker heat-up rate for T(exp) <=129.9°C (265.8°F)

PH1890 – LIQUID HEAT-UP: 1SV & 14SV energize and steam pressurizes the chamber. As the chamber temperature approaches the programmed exposure temperature, 1SV is controlled (via chamber RTD) to slow down the ascent. When the programmed exposure temperature T(exp) is reached (sensed by the chamber RTD), the phase is then complete.

PH1990 – LIQUID DWELL: 14SV is energized & 1SV is controlled to maintain the selected exposure temperature. When the programmed time period expires and the programmed exposure temperature +0.2°C (0.4°F) is reached (sensed by the chamber RTD), the phase is complete.

PH2000 / PH2088 (Flash Cycles only) – EXPOSURE: The programmed exposure timing begins. 14SV is energized & 1SV is controlled by the chamber RTD to maintain the selected exposure temperature. After the programmed exposure time expires, 1SV & 14SV de-energizes and the phase is complete.

PH2090 – LIQUID EXPOSURE: The programmed exposure timing begins. 14SV is energized & 1SV is controlled by the chamber RTD to maintain the selected exposure temperature. After the programmed exposure time expires, 1SV & 14SV de-energizes and the phase is complete.

PH3100 – EXHAUST: 2SV, 6SV, & 14SV energize. Chamber steam is exhausted to ejector, condensed and drained.

- **For Gravity Drying:** When chamber pressure reaches atmosphere, 2SV, 6SV, & 14SV de-energizes and the phase is complete.
- **For Vacuum Drying (including B-D Test & Leak Test Cycles):** When chamber pressure reaches 4.75 PSIA, 2SV, 6SV, & 14SV de-energizes and the phase is complete.

PH3190 – LIQUID EXHAUST: 8SV de-energizes. Chamber pressure is decreased at a programmed ramp rate by energizing and de-energizing 2SV. When chamber temperature falls to 100°C (212°F), the exhaust rate is reduced by half the programmed ramp rate. When chamber pressure reaches 6 PSI above atmosphere, 6SV energizes. When chamber pressure falls to 11.00 PSIA, the phase is complete.

PH3110 – DRYING: The programmed dry timing begins. For unit with ejector only, 2SV, 6SV & 14SV energize. If Gravity Drying was selected, 3SV also energizes. When the time period elapses, 2SV, 3SV, 6SV, & 14SV de-energize and the phase is complete. Note: For Leak Test cycle, the time in this phase is fixed at 15 minutes.

PH3700 – EQUALIZATION: 14SV is energized. All other SV's, except for door and jacket control, are de-energized. After a dwell period of 5 minutes, the phase is complete.

PH3710 – LEAK TEST: 14SV is energized. All other SV's, except for door and jacket control, are de-energized. Chamber pressure is initially checked. After 15 minutes, chamber pressure is checked again to determine leak rate and the phase is complete.

PH3800 – AIR-IN: 3SV & 14SV energize and, for Liquid cycles, 8SV remains de-energized. When chamber pressure is within 2 PSI of atmosphere, 3SV & 14SV de-energizes and the phase is complete.

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Approved By:	SEB	2/1/02	Doc. File Name:	PP0012 Rev A Page 3-4	Latest ECO:	120590
Approved By:			Doc. File Type:	MS Word 97	Page:	3 of 4

PH4000 – CYCLE COMPLETE: 2SV & 3SV energize and, for Liquid cycles, 8SV remains de-energizes. The cycle complete buzzer sounds for 1 minute or until clear button is pressed. The door(s) automatically unsealed. When either door is opened, the buzzer will turn OFF (if not already OFF) and the phase is complete. Note: 2SV & 3SV de-energizes when door is unsealed (sensed by DI02).

SEALING DOOR(S): **PH0110/0130 – Door SEAL:** 10SV energizes and 12SV de-energizes. Gasket groove is pressurized, sealing the chamber.

UNSEALING DOOR(S): **PH0111/0131 – Door UNSEAL:** 3SV & 10SV remains energized. 12SV & 6SV energize. After 4 seconds, 10SV de-energizes. Water to the ejector creates a vacuum in the gasket groove retracting the door gasket. After 30 seconds, 6SV & 3SV de-energize and the phase is complete.

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Figure 8–7. WATER SAVER PACKAGE

At the time of this printing, final details were not available for this option.

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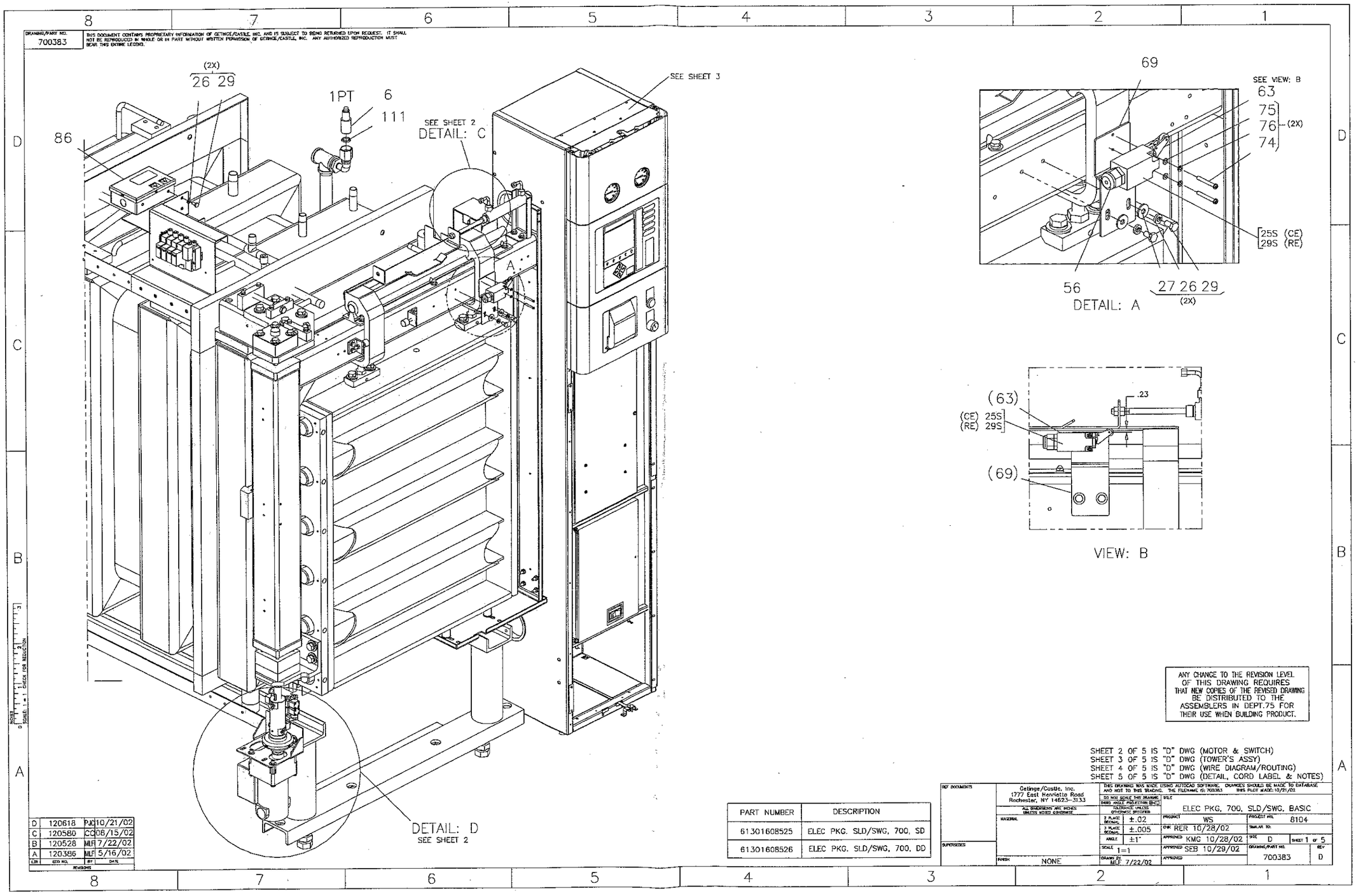
Section 9 Electrical Schematics

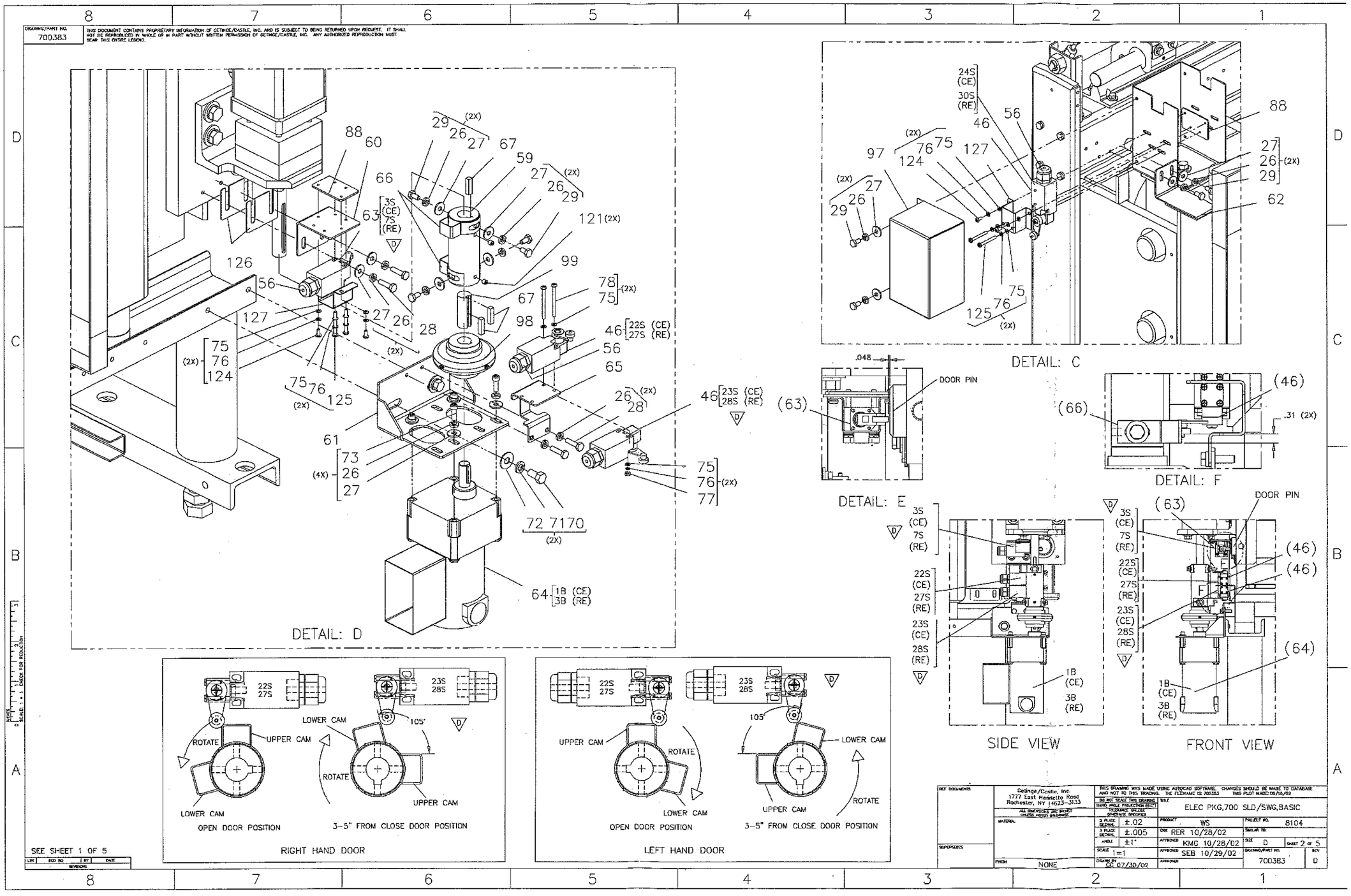
NUMBER	TITLE	DRAWING NUMBER	PAGE
9–1	ELECTRICAL PACKAGE, 700 SERIES, SLIDE/SWING DOOR	700383	9–2
9–2	WIRING DIAGRAM, SYSTEM, 700 SERIES	W1310	9–7
9–3	WIRING DIAGRAM, OPTIONAL EQUIPMENT	W1306	9–11
9–4	POWER BOX ASSEMBLY 1A	A08498	9–12
9–5	CONTROL BOX ASSEMBLY 2A	A08019	9–14
9–6	DOOR I/F BOX BOX ASSEMBLY 15A/16A	A08609	9–16
9–7	ELECTRICAL SCHEMATIC, SYSTEM WIRING, 700 SERIES	W1311	9–18
9–8	ELECTRICAL SCHEMATIC, POWER BOX 1A	W1304	9–21
9–9	ELECTRICAL SCHEMATIC, CONTROL OUTPUTS	W1307	9–22
9–10	ELECTRICAL SCHEMATIC, SLIDE/SWING DOORS	W1313	9–24
9–11	WIRING DIAGRAM, VACUUM PUMP 11A	W1281	9–25
9–12	WIRING DIAGRAM, WALL MOUNT CONTROL PANEL 36A (CE)	A08310	9–26
9–13	WIRING DIAGRAM, WALL MOUNT CONTROL PANEL, 37A (RE)	A08311	9–27
9–14	WIRING DIAGRAM, WATER SAVER 47A	W1297	9–28

Axxxxx = 613016xxxxx

Refer to 700 Series Parts Catalog (Pub. No. 61301608215) for the part numbers of items called out on the assembly drawings.

Figure 9–1. ELECTRICAL PACKAGE, 700 SERIES, SLIDE/SWING DOOR (sheet 1 of 5)

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DETAIL: D
DETAIL: C
DETAIL: E
DETAIL: F
SIDE VIEW
FRONT VIEW
DOOR PIN
.048
.31 (2X)
ROTATE
UPPER CAM
LOWER CAM
105°
OPEN DOOR POSITION
3–5" FROM CLOSE DOOR POSITION
RIGHT HAND DOOR
LEFT HAND DOOR
SEE SHEET 1 OF 5
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ELEC PKG,700 SLD/SWG,BASIC
PROJECT WS
PROJECT NO. 8104
CHK RER 10/28/02
APPROVED KMG 10/28/02
APPROVED SEB 10/29/02
SIZE D
SHEET 2 OF 5
SCALE 1=1
DRAWING BY CE 07/30/02
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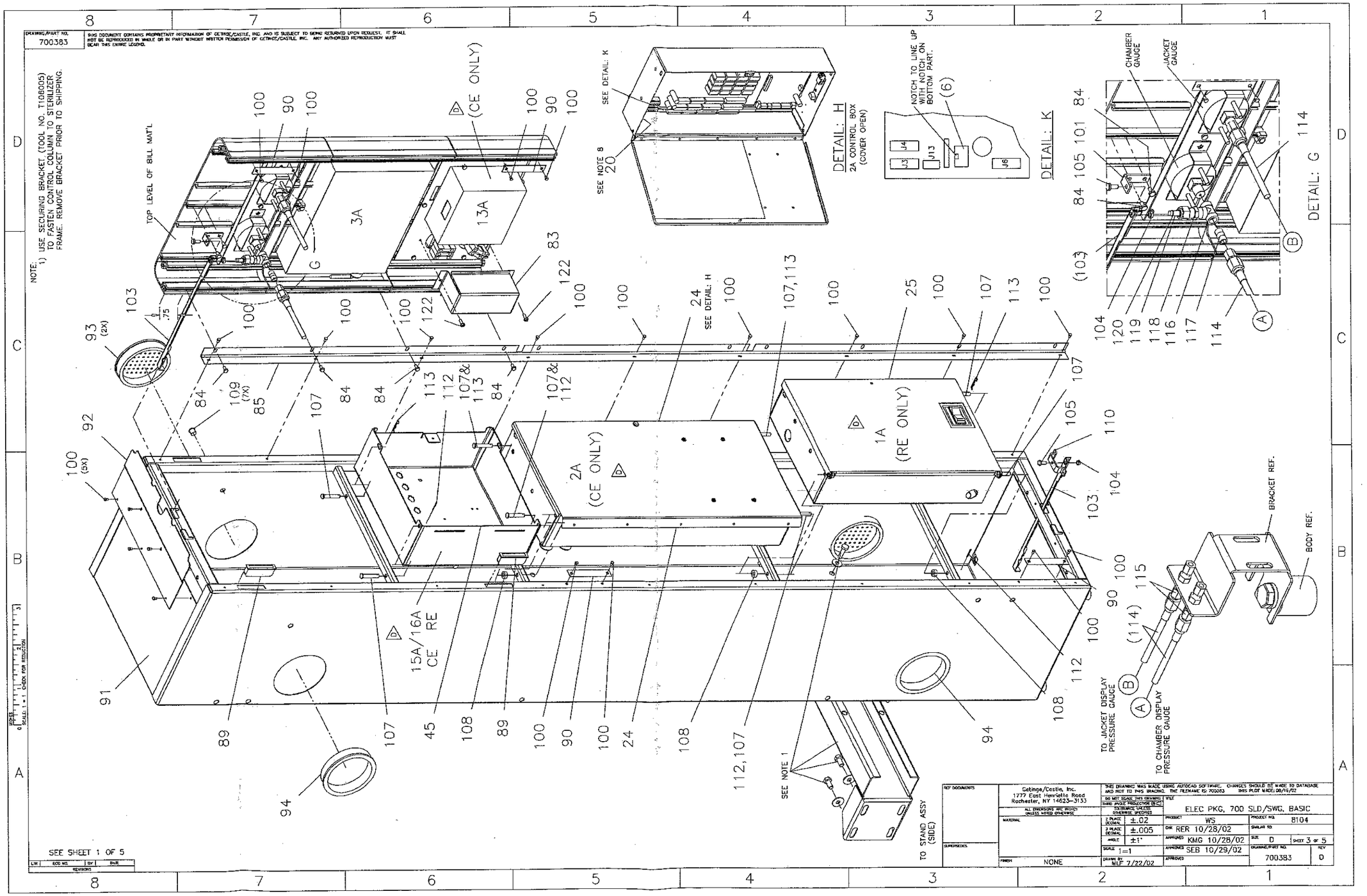
DRAWING/PART NO. 700383
REV D

Figure 9–1. ELECTRICAL PACKAGE, 700 SERIES, SLIDE/SWING DOOR (sheet 3 of 5)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NOTE:
1) USE SECURING BRACKET (TOOL NO. T108005) TO FASTEN CONTROL COLUMN TO STERILIZER FRAME. REMOVE BRACKET PRIOR TO SHIPPING.
TOP LEVEL OF BILL MAT'L
3A
13A
(CE ONLY)
SEE DETAIL: K
SEE NOTE 8
20
DETAIL: H
2A CONTROL BOX (COVER OPEN)
NOTCH TO LINE UP WITH NOTCH ON BOTTOM PART.
(6)
J4
J13
J3
J6
DETAIL: K
CHAMBER GAUGE
JACKET GAUGE
DETAIL: G
2A (CE ONLY)
1A (RE ONLY)
15A/16A CE RE
SEE DETAIL: H
SEE NOTE 1
TO STAND ASSY (SIDE)
TO JACKET DISPLAY PRESSURE GAUGE
TO CHAMBER DISPLAY PRESSURE GAUGE
BRACKET REF.
BODY REF.
SEE SHEET 1 OF 5
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ELEC PKG, 700 SLD/SWG, BASIC
8104
700383
SHEET 3 OF 5

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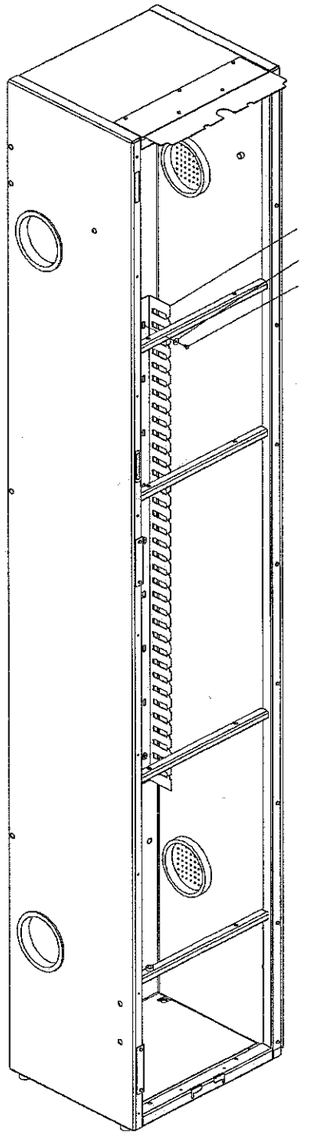
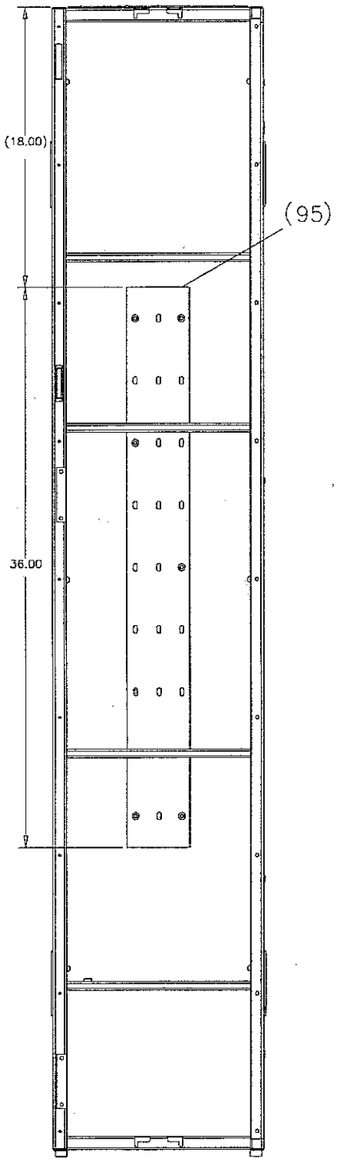
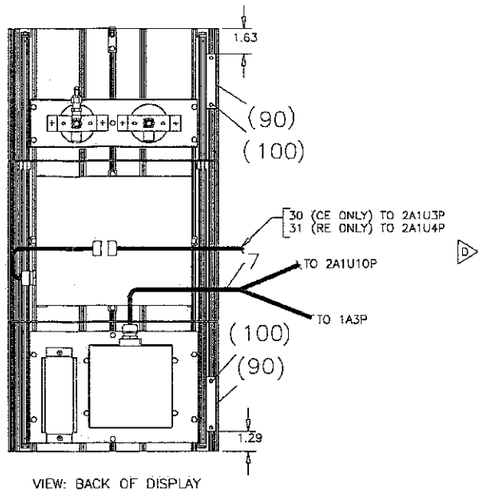




VIEW: FRONT



VIEW: BACK OF DISPLAY

NOTES:

1) REFER TO SYSTEM WIRING DIAGRAM, W1310 FOR ELECTRICAL CONNECTION.
2) COIL UP ALL EXCESS WIRE.
3) USE WIRE TIES (ITEM 1) TO DRESS OUT CORDS AS REQUIRED. USE BARBED WIRE TIES (ITEM 23) TO ROUTE DOOR SWITCH CORDS UP FRONT FRAME MEMBERS.
4) PLACE ONE (1) LABEL ON EACH END OF CORD.
5) CUT OFF ELECTRICAL CONNECTOR & STRIP WIRES .25 FOR CONNECTION TO 2A2U4P FOR 1RT & 2A2U3P FOR 2RT.
6) CORD ROUTING:
   a) ROUTE CORDS UTILIZING THE FRAME, AND WIRE TIES. USE CLIP-ON WIRE TIE MOUNT (ITEM 40) AS NEEDED.
   b) MAINTAIN SEPARATION OF CORDS FOR 3S, 7S, 4S & 8S FROM OTHER CORDS.
   c) CORDS MUST BE ROUTED SO AS NOT TO CONTACT STEAM LINES OR HOT SURFACES.
7) GRASP KNURL PART OF TRANSDUCER (ITEM 6) & HAND TIGHTEN TRANSDUCER SNUGLY INTO PIPE ADAPTER. DO NOT USE WRENCH ON TRANSDUCER.
8) INSERT PRESSURE TRANSDUCER DOCUMENTS INTO IT'S ORIGINAL PLASTIC BAG, AFFIX LABEL (ITEM 20) ONTO BAG, AND AFFIX BAG UPRIGHT WITH ADHESIVE TAPE AS SHOWN IN DETAIL: H.
9) THE PRESSURE TRANSDUCER, RESISITOR NETWORK, AND IT'S CORRESPONDING DOCUMENTATION MUST REMAIN TOGETHER IN THE SAME CONTROL BOX ASSEMBLY (ITEM 24).
10) WHERE APPLICABLE, ADD WIRE TIE (ITEM 1) ON CORDS WITHIN THE CONTROL BOX TO ASSURE STRAIN RELIEF.
11) ROUTE PRESSURE TRANSDUCER CORD (ITEM 5) THROUGH THIS CABLE CLAMP.
12) SLIDE GREEN/YELLOW TUBING (ITEM 87) OVER EXPOSED GREEN WIRE OF CORDS ITEMS 57,58 & 79.

CORD LABEL (ITEM 18) PLACEMENT

ITEM NO.	PART NO.	CORD LABEL SEE NOTE 4	NOTES
2	61301608702	2A1PS/4S	
3	61301608701	2A3PI/4S	
4	61301608572	1A4P/2S	
5	61301608703	2A2U3P/1PT	
7	61301608334	1A3P/13A 2A1U10P/13A	
8	61301608435	2A1PP/1S	
8	61301608435	1A2P/1S	SD ONLY
9	61301608512	1S/6S 10S/11S	DD ONLY
10	61301608700	1A2P/6S	DD ONLY
11	61301608436	2A10PI/1S 2A10PI/10S	
13	61301608432	2A4U1P/1A1P	
16	61301608905	2A9PI/5S	
30	61301608360	2A1U3P/3A	
31	61301608434	2A1U4P/5A	DD ONLY
33	61301608907	1A5P/5SV	
33	61301608907	2A6PO/6SV	
33	61301608907	2A11PO/10SV	
33	61301608907	2A12PO/12SV	
43	61301601283	1S/10S	
43	61301601283	6S/11S	DD ONLY

CORD LABEL (ITEM 18) PLACEMENT

ITEM NO.	PART NO.	CORD LABEL SEE NOTE 4	NOTES
47	61301601563	15A3P/2A9PO	
47	61301601563	15A4P/2A10PO	
47	61301601563	2A1PP/15A11P	
48	61301601245	16A3P/2A13PO	DD ONLY
48	61301601245	16A4P/2A14PO	DD ONLY
48	61301601245	2A1PP/16A11P	DD ONLY
49	61301608704	2A1PI/22S	
49	61301608704	2A2PI/3S	
49	61301608704	15A12P/24S	
49	61301608704	16A12P/29S	DD ONLY
49	61301608704	2A10PI/6S 2A10PI/11S	DD ONLY
49	61301608704	2A5PI/27S	DD ONLY
49	61301608704	2A6PI/7S	DD ONLY
50	61301608743	15A8P/25S	
50	61301608743	16A8P/30S	DD ONLY
50	61301608743	15A7P/23S	
50	61301608743	16A7P/28S	DD ONLY
51	61301608906	2A1PO/1SV	
51	61301608906	2A2PO/2SV	
51	61301608906	2A3PO/3SV	

CORD LABEL (ITEM 18) PLACEMENT

ITEM NO.	PART NO.	CORD LABEL SEE NOTE 4	NOTES
51	61301608906	2A8PO/8SV	
51	61301608906	2A4PO/14SV	
51	61301608906	15A6P/20SV	
51	61301608906	15A5P/21SV	
51	61301608906	16A6P/24SV	DD ONLY
51	61301608906	16A5P/25SV	DD ONLY
53	61301608922	15A9P/3S	
53	61301608922	16A9P/7S	DD ONLY
57	61301608705	15A1P/1A3TB	
58	61301608706	16A1P/1A3TB	DD ONLY
79	61301608961	1A1TB/18A	
80	61301608846	2A3PS/15A10P	
81	61301608847	2A3PS/16A10P	DD ONLY
82	61301608848	15A2P/1B	
82	61301608848	16A2P/3B	DD ONLY

SEE SHEET 1 OF 5

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2 PLACE DECIMAL ±.005
ANGLE ±1°

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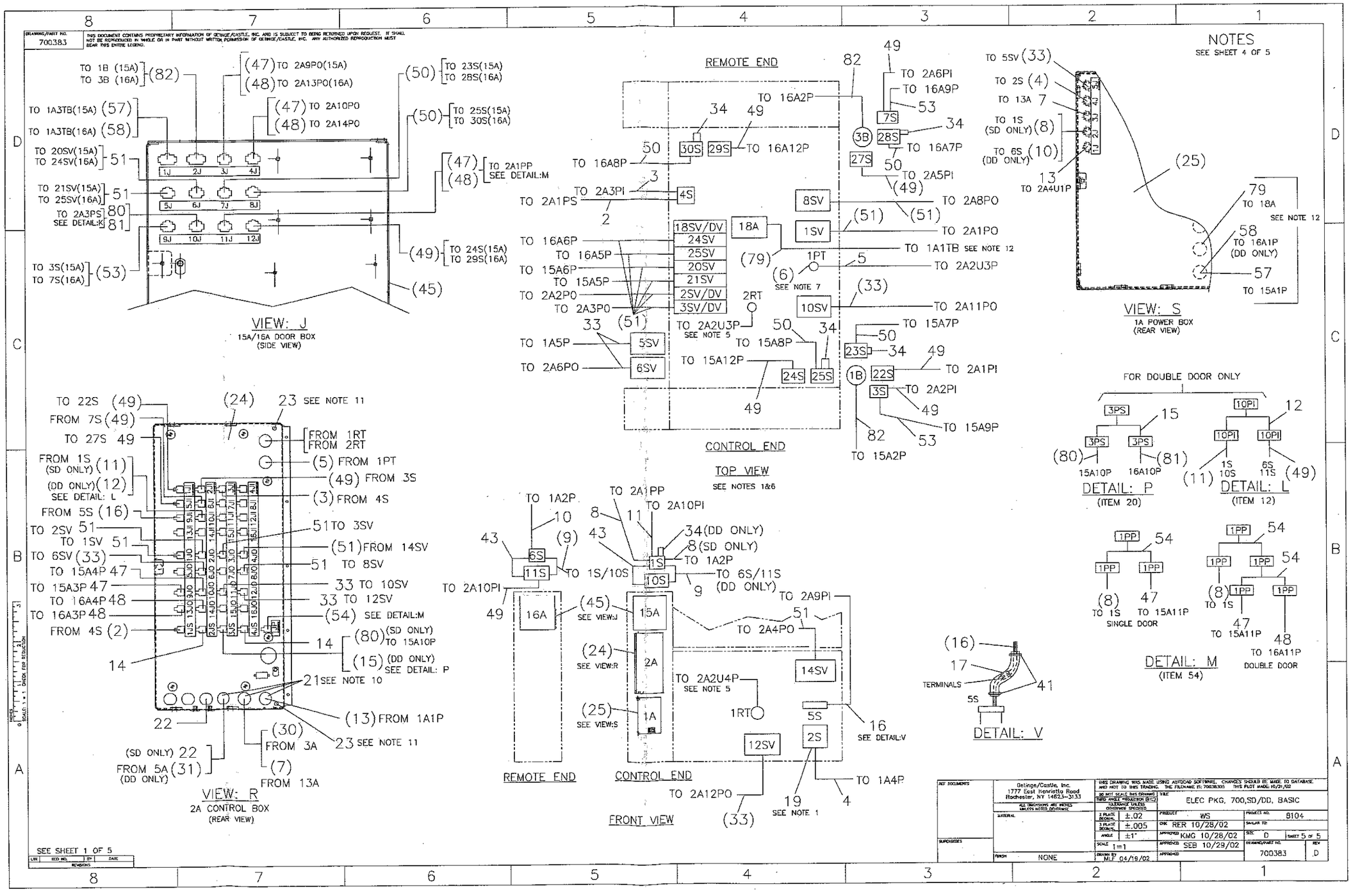
PRODUCT: WS
PROJECT NO. 8104
CHK: RER 10/28/02
SIMILAR TO:
APPROVED: KMG 10/28/02
SIZE: D
SHEET 4 OF 5
APPROVED: SEB 10/29/02
DRAWING/PART NO. 700383
REV: D

Figure 9–1. ELECTRICAL PACKAGE, 700 SERIES, SLIDE/SWING DOOR (sheet 5 of 5)



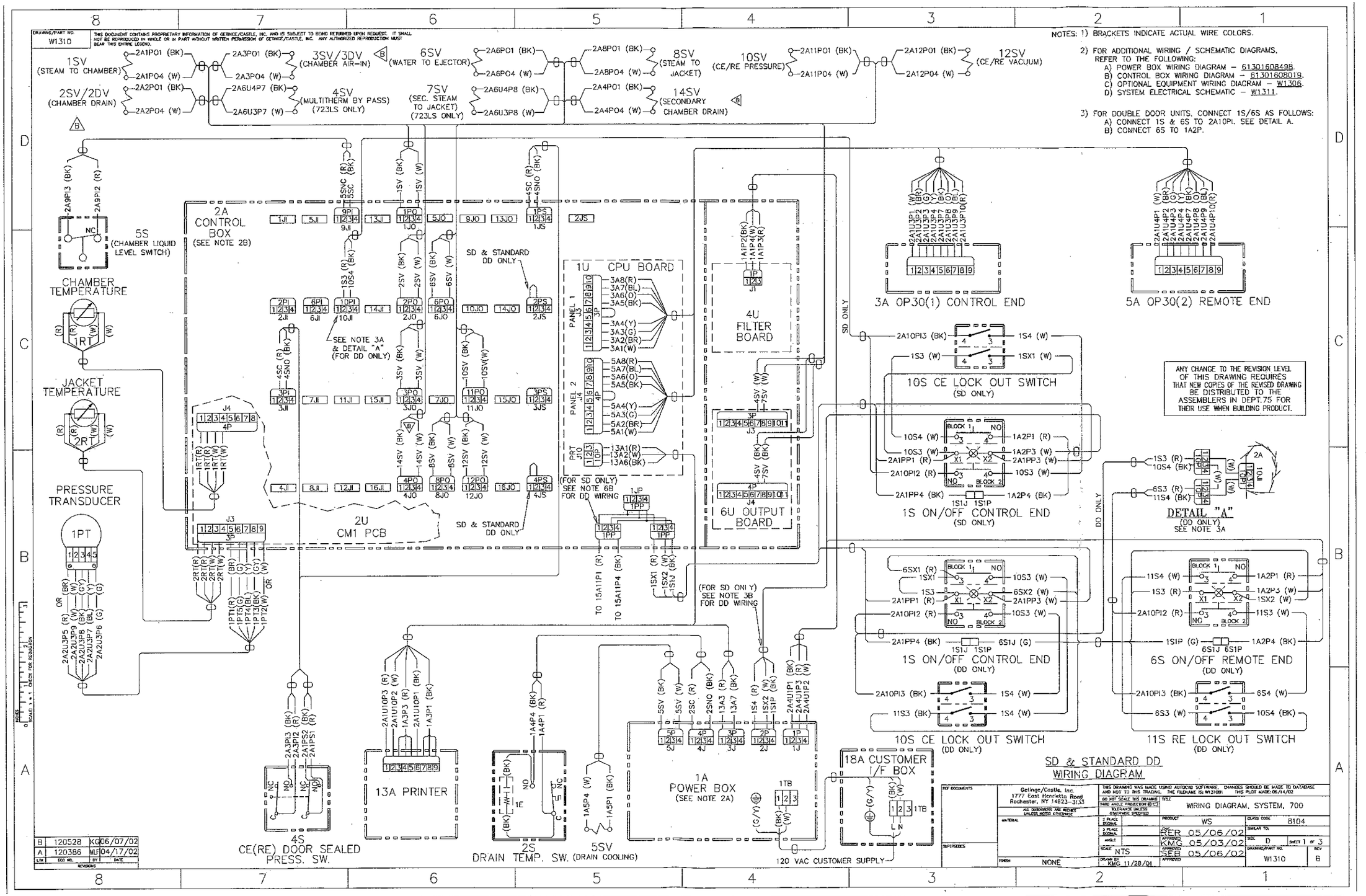
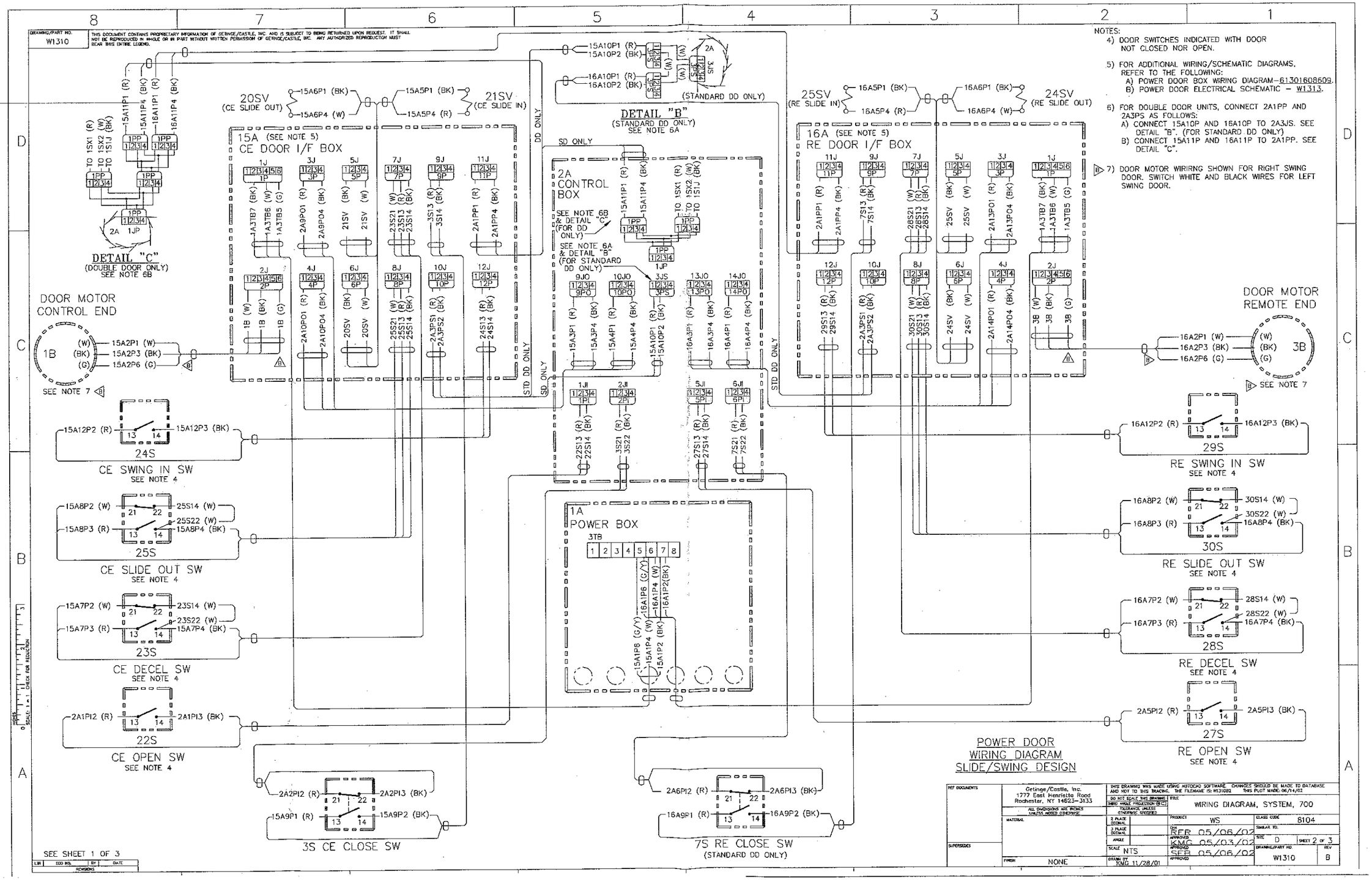

NOTES: 1) BRACKETS INDICATE ACTUAL WIRE COLORS.
2) FOR ADDITIONAL WIRING / SCHEMATIC DIAGRAMS, REFER TO THE FOLLOWING:
A) POWER BOX WIRING DIAGRAM – 61301608498.
B) CONTROL BOX WIRING DIAGRAM – 61301608019.
C) OPTIONAL EQUIPMENT WIRING DIAGRAM – W1306.
D) SYSTEM ELECTRICAL SCHEMATIC – W1311.
3) FOR DOUBLE DOOR UNITS, CONNECT 1S/6S AS FOLLOWS:
A) CONNECT 1S & 6S TO 2A10PI. SEE DETAIL A.
B) CONNECT 6S TO 1A2P.
1SV (STEAM TO CHAMBER)
2SV/2DV (CHAMBER DRAIN)
3SV/3DV (CHAMBER AIR-IN)
4SV (MULTITHERM BY PASS) (723LS ONLY)
6SV (WATER TO EJECTOR)
7SV (SEC. STEAM TO JACKET) (723LS ONLY)
8SV (STEAM TO JACKET)
10SV (CE/RE PRESSURE)
12SV (CE/RE VACUUM)
14SV (SECONDARY CHAMBER DRAIN)
5S (CHAMBER LIQUID LEVEL SWITCH)
CHAMBER TEMPERATURE
1RT
JACKET TEMPERATURE
2R
PRESSURE TRANSDUCER
1PT
2A CONTROL BOX (SEE NOTE 2B)
2U CM1 PCB
1U CPU BOARD
4U FILTER BOARD
6U OUTPUT BOARD
SD & STANDARD DD ONLY
SEE NOTE 3A & DETAIL "A" (FOR DD ONLY)
(FOR SD ONLY) SEE NOTE 6B FOR DD WIRING
(FOR SD ONLY) SEE NOTE 3B FOR DD WIRING
3A OP30(1) CONTROL END
5A OP30(2) REMOTE END
10S CE LOCK OUT SWITCH (SD ONLY)
1S ON/OFF CONTROL END (SD ONLY)
DETAIL "A" (DD ONLY) SEE NOTE 3A
1S ON/OFF CONTROL END (DD ONLY)
6S ON/OFF REMOTE END (DD ONLY)
10S CE LOCK OUT SWITCH (DD ONLY)
11S RE LOCK OUT SWITCH (DD ONLY)
ANY CHANGE TO THE REVISION LEVEL OF THIS DRAWING REQUIRES THAT NEW COPIES OF THE REVISED DRAWING BE DISTRIBUTED TO THE ASSEMBLERS IN DEPT. 75 FOR THEIR USE WHEN BUILDING PRODUCT.
SD ONLY
DD ONLY
13A PRINTER
1A POWER BOX (SEE NOTE 2A)
18A CUSTOMER I/F BOX
4S CE(RE) DOOR SEALED PRESS. SW.
2S DRAIN TEMP. SW.
5SV (DRAIN COOLING)
120 VAC CUSTOMER SUPPLY
SD & STANDARD DD WIRING DIAGRAM
Getinge/Castle, Inc. 1777 East Henrietta Road Rochester, NY 14623-3133
WIRING DIAGRAM, SYSTEM, 700
W1310
B 120528 KG 06/07/02
A 120386 MJF 04/17/02

Figure 9–2. WIRING DIAGRAM, SYSTEM, 700 SERIES (sheet 2 of 3)


DRAWING/PART NO. W1310
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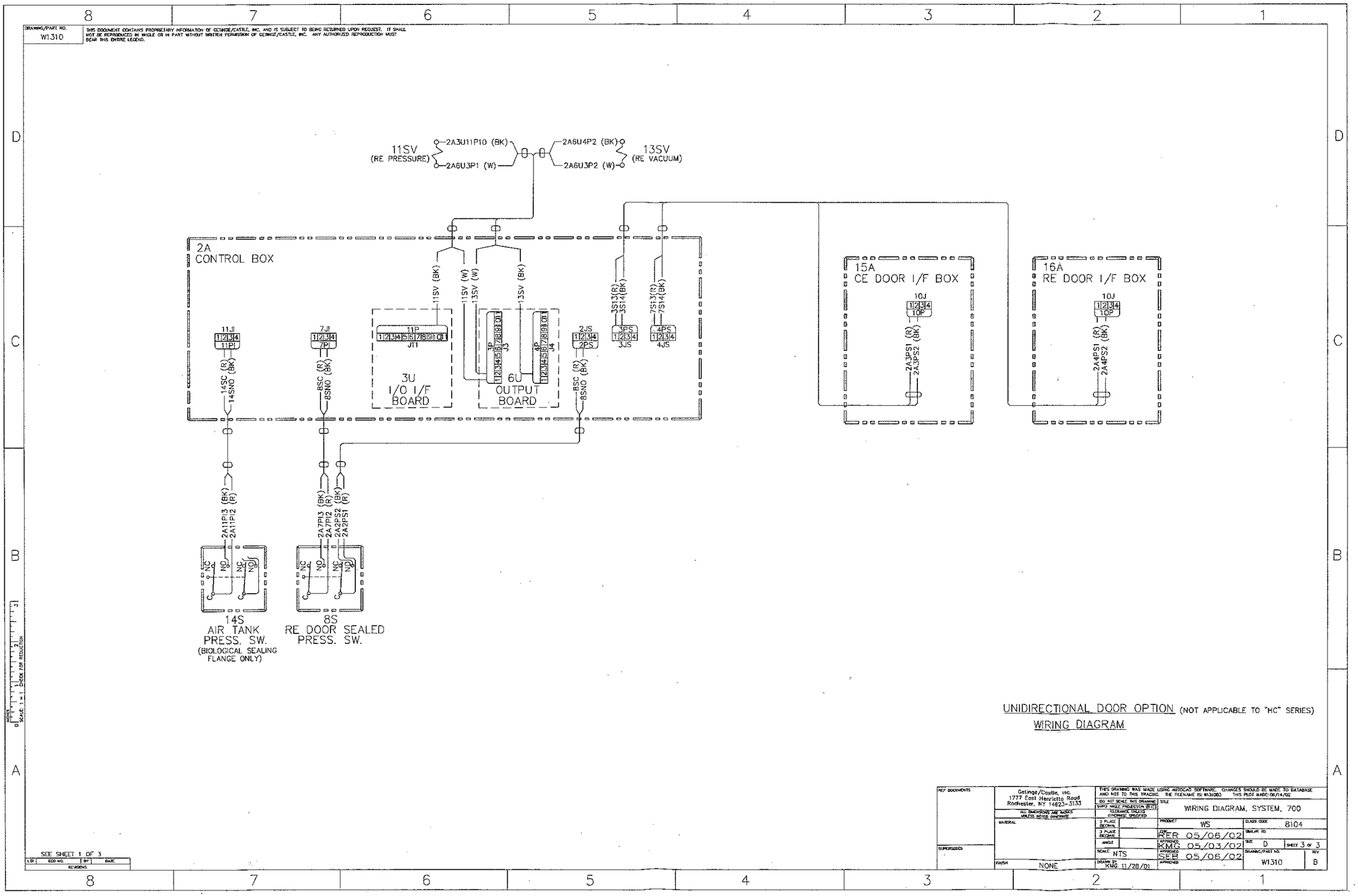
NOTES:
4) DOOR SWITCHES INDICATED WITH DOOR NOT CLOSED NOR OPEN.
5) FOR ADDITIONAL WIRING/SCHEMATIC DIAGRAMS, REFER TO THE FOLLOWING:
A) POWER DOOR BOX WIRING DIAGRAM–61301608609.
B) POWER DOOR ELECTRICAL SCHEMATIC – W1313.
6) FOR DOUBLE DOOR UNITS, CONNECT 2A1PP AND 2A3PS AS FOLLOWS:
A) CONNECT 15A10P AND 16A10P TO 2A3JS. SEE DETAIL "B". (FOR STANDARD DD ONLY)
B) CONNECT 15A11P AND 16A11P TO 2A1PP. SEE DETAIL "C".
7) DOOR MOTOR WIRIRNG SHOWN FOR RIGHT SWING DOOR. SWITCH WHITE AND BLACK WIRES FOR LEFT SWING DOOR.
DETAIL "C" (DOUBLE DOOR ONLY) SEE NOTE 6B
DETAIL "B" (STANDARD DD ONLY) SEE NOTE 6A
20SV (CE SLIDE OUT)
21SV (CE SLIDE IN)
25SV (RE SLIDE IN)
24SV (RE SLIDE OUT)
15A (SEE NOTE 5) CE DOOR I/F BOX
16A (SEE NOTE 5) RE DOOR I/F BOX
2A CONTROL BOX
1A POWER BOX
DOOR MOTOR CONTROL END
DOOR MOTOR REMOTE END
SEE NOTE 7
24S CE SWING IN SW SEE NOTE 4
25S CE SLIDE OUT SW SEE NOTE 4
23S CE DECEL SW SEE NOTE 4
22S CE OPEN SW SEE NOTE 4
3S CE CLOSE SW
7S RE CLOSE SW (STANDARD DD ONLY)
29S RE SWING IN SW SEE NOTE 4
30S RE SLIDE OUT SW SEE NOTE 4
28S RE DECEL SW SEE NOTE 4
27S RE OPEN SW SEE NOTE 4
STD DD ONLY
SD ONLY
POWER DOOR WIRING DIAGRAM SLIDE/SWING DESIGN
Getinge/Castle, Inc. 1777 East Henrietta Road Rochester, NY 14623–3133
WIRING DIAGRAM, SYSTEM, 700
PRODUCT WS
CLASS CODE 8104
W1310
B
SHEET 2 OF 3
SEE SHEET 1 OF 3


DRAWING/PART NO. W1310
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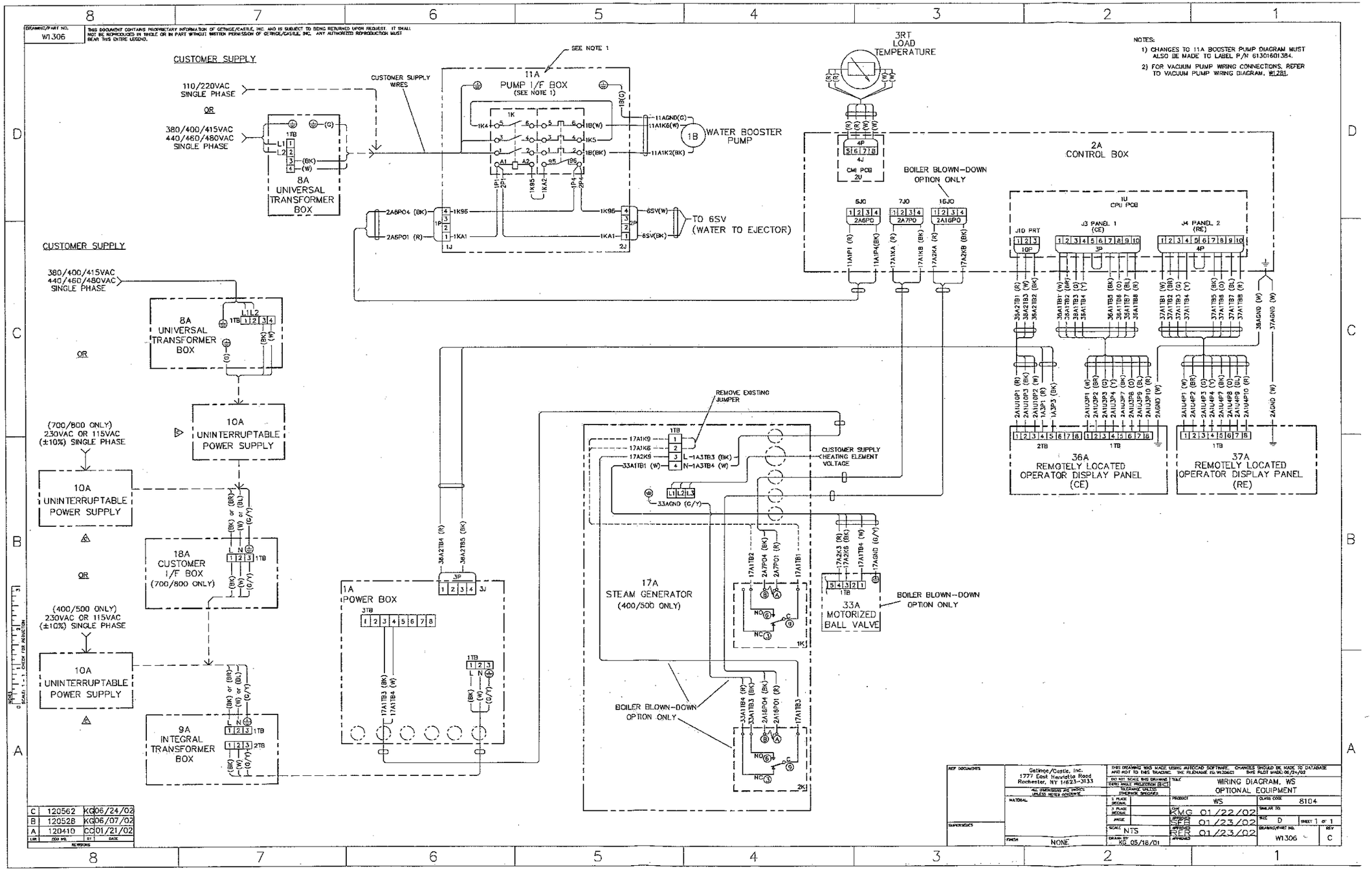
11SV (RE PRESSURE)
2A3U11P10 (BK)
2A6U3P1 (W)
2A6U4P2 (BK)
2A6U3P2 (W)
13SV (RE VACUUM)
2A CONTROL BOX
11SV (BK)
11SV (W)
13SV (BK)
3S13(R)
3S14(BK)
7S13(R)
7S14(BK)
11J
11P
7J
7P
11P
J11
3U I/O I/F BOARD
3P
J3
6U OUTPUT BOARD
4P
J4
2JS
2PS
3JS
3PS
4JS
4PS
14SC (R)
14SNO (BK)
8SC (R)
8SNO (BK)
8SC (R)
8SNO (BK)
2A11P13 (BK)
2A11P12 (R)
2A7P13 (BK)
2A7P12 (R)
2A2PS2 (BK)
2A2PS1 (R)
NC
NO
C
14S AIR TANK PRESS. SW. (BIOLOGICAL SEALING FLANGE ONLY)
8S RE DOOR SEALED PRESS. SW.
15A CE DOOR I/F BOX
10J
10P
2A3PS1 (R)
2A3PS2 (BK)
16A RE DOOR I/F BOX
2A4PS1 (R)
2A4PS2 (BK)
UNIDIRECTIONAL DOOR OPTION (NOT APPLICABLE TO "HC" SERIES)
WIRING DIAGRAM
SEE SHEET 1 OF 3
Getinge/Castle, inc. 1777 East Henrietta Road Rochester, NY 14623-3133
WIRING DIAGRAM, SYSTEM, 700
WS
8104
RFR 05/06/02
KMC 05/03/02
SEB 05/06/02
W1310
B
SHEET 3 OF 3
NONE
KMC 11/28/01


DRAWING/PART NO. W1306
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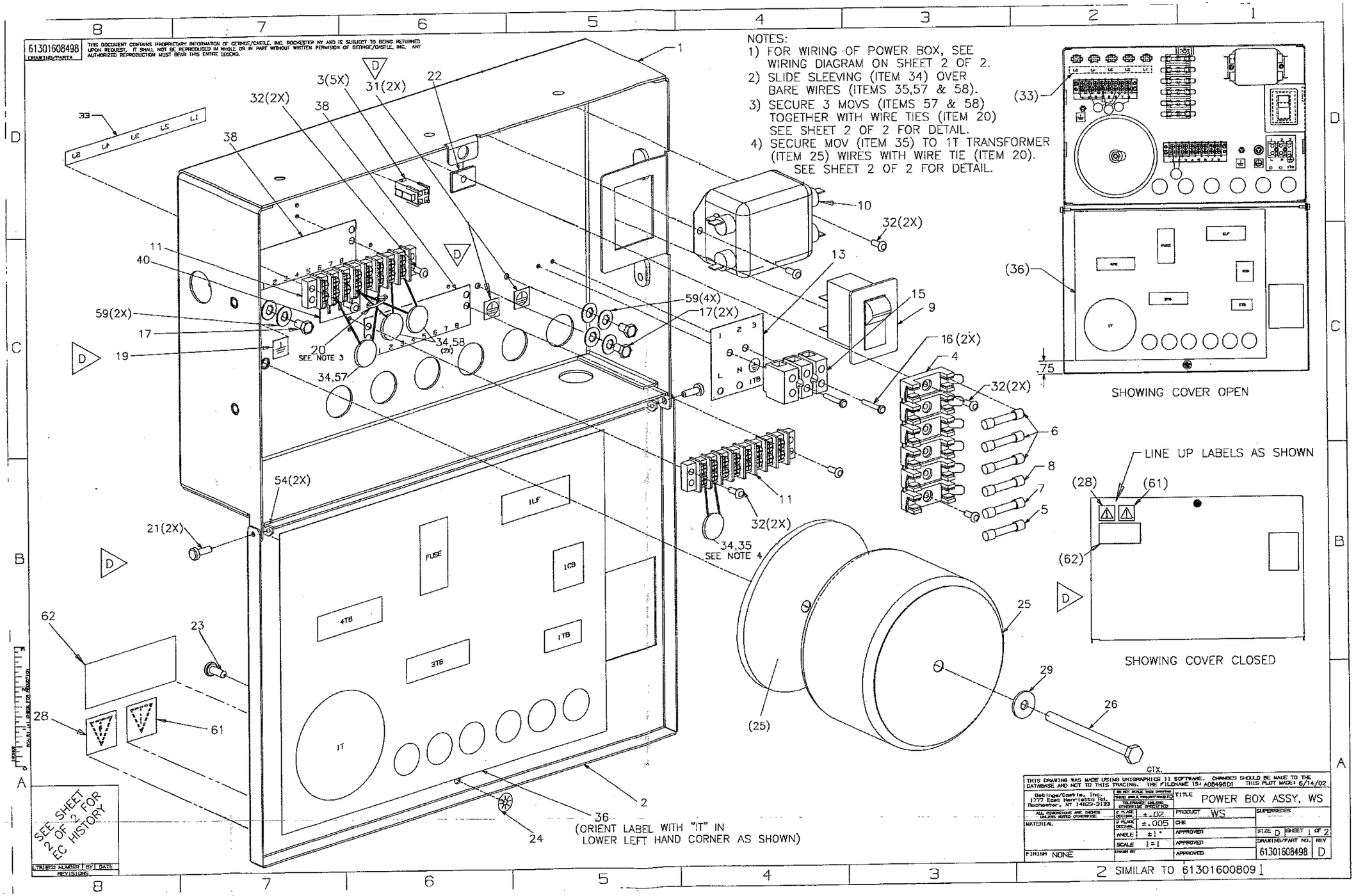
NOTES:
1) CHANGES TO 11A BOOSTER PUMP DIAGRAM MUST ALSO BE MADE TO LABEL P/N 61301601384.
2) FOR VACUUM PUMP WIRING CONNECTIONS, REFER TO VACUUM PUMP WIRING DIAGRAM, W1281.
CUSTOMER SUPPLY
110/220VAC SINGLE PHASE
OR
380/400/415VAC 440/460/480VAC SINGLE PHASE
CUSTOMER SUPPLY WIRES
SEE NOTE 1
11A PUMP I/F BOX (SEE NOTE 1)
8A UNIVERSAL TRANSFORMER BOX
1B WATER BOOSTER PUMP
TO 6SV (WATER TO EJECTOR)
3RT LOAD TEMPERATURE
2A CONTROL BOX
CMI PCB 2U
BOILER BLOWN-DOWN OPTION ONLY
1U CPU PCB
J10 PRT
J3 PANEL 1 (CE)
J4 PANEL 2 (RE)
CUSTOMER SUPPLY
380/400/415VAC 440/460/480VAC SINGLE PHASE
8A UNIVERSAL TRANSFORMER BOX
OR
10A UNINTERRUPTABLE POWER SUPPLY
(700/800 ONLY) 230VAC OR 115VAC (±10%) SINGLE PHASE
10A UNINTERRUPTABLE POWER SUPPLY
18A CUSTOMER I/F BOX (700/800 ONLY)
OR
(400/500 ONLY) 230VAC OR 115VAC (±10%) SINGLE PHASE
10A UNINTERRUPTABLE POWER SUPPLY
9A INTEGRAL TRANSFORMER BOX
1A POWER BOX
REMOVE EXISTING JUMPER
CUSTOMER SUPPLY HEATING ELEMENT VOLTAGE
17A STEAM GENERATOR (400/500 ONLY)
33A MOTORIZED BALL VALVE
BOILER BLOWN-DOWN OPTION ONLY
BOILER BLOWN-DOWN OPTION ONLY
36A REMOTELY LOCATED OPERATOR DISPLAY PANEL (CE)
37A REMOTELY LOCATED OPERATOR DISPLAY PANEL (RE)
C 120562 KG 06/24/02
B 120528 KG 06/07/02
A 120410 CC 01/21/02
REVISIONS
Getinge/Castle, Inc. 1777 East Henrietta Road Rochester, NY 14623-3133
WIRING DIAGRAM, WS OPTIONAL EQUIPMENT
PRODUCT WS
CLASS CODE 8104
SIZE D
SHEET 1 OF 1
DRAWING/PART NO. W1306
REV C
SCALE NTS
FINISH NONE
DRAWN BY KG 05/18/01
CHECKED SMG 01/22/02
APPROVED 01/23/02
APPROVED 01/23/02

Figure 9–4. POWER BOX ASSEMBLY 1A (sheet 1 of 2)


NOTES:
1) FOR WIRING OF POWER BOX, SEE WIRING DIAGRAM ON SHEET 2 OF 2.
2) SLIDE SLEEVING (ITEM 34) OVER BARE WIRES (ITEMS 35,57 & 58).
3) SECURE 3 MOVS (ITEMS 57 & 58) TOGETHER WITH WIRE TIES (ITEM 20) SEE SHEET 2 OF 2 FOR DETAIL.
4) SECURE MOV (ITEM 35) TO 1T TRANSFORMER (ITEM 25) WIRES WITH WIRE TIE (ITEM 20). SEE SHEET 2 OF 2 FOR DETAIL.
SHOWING COVER OPEN
LINE UP LABELS AS SHOWN
SHOWING COVER CLOSED
(ORIENT LABEL WITH "IT" IN LOWER LEFT HAND CORNER AS SHOWN)
SEE SHEET 2 OF 2 FOR EC HISTORY
POWER BOX ASSY, WS
61301608498
SIMILAR TO 61301600809

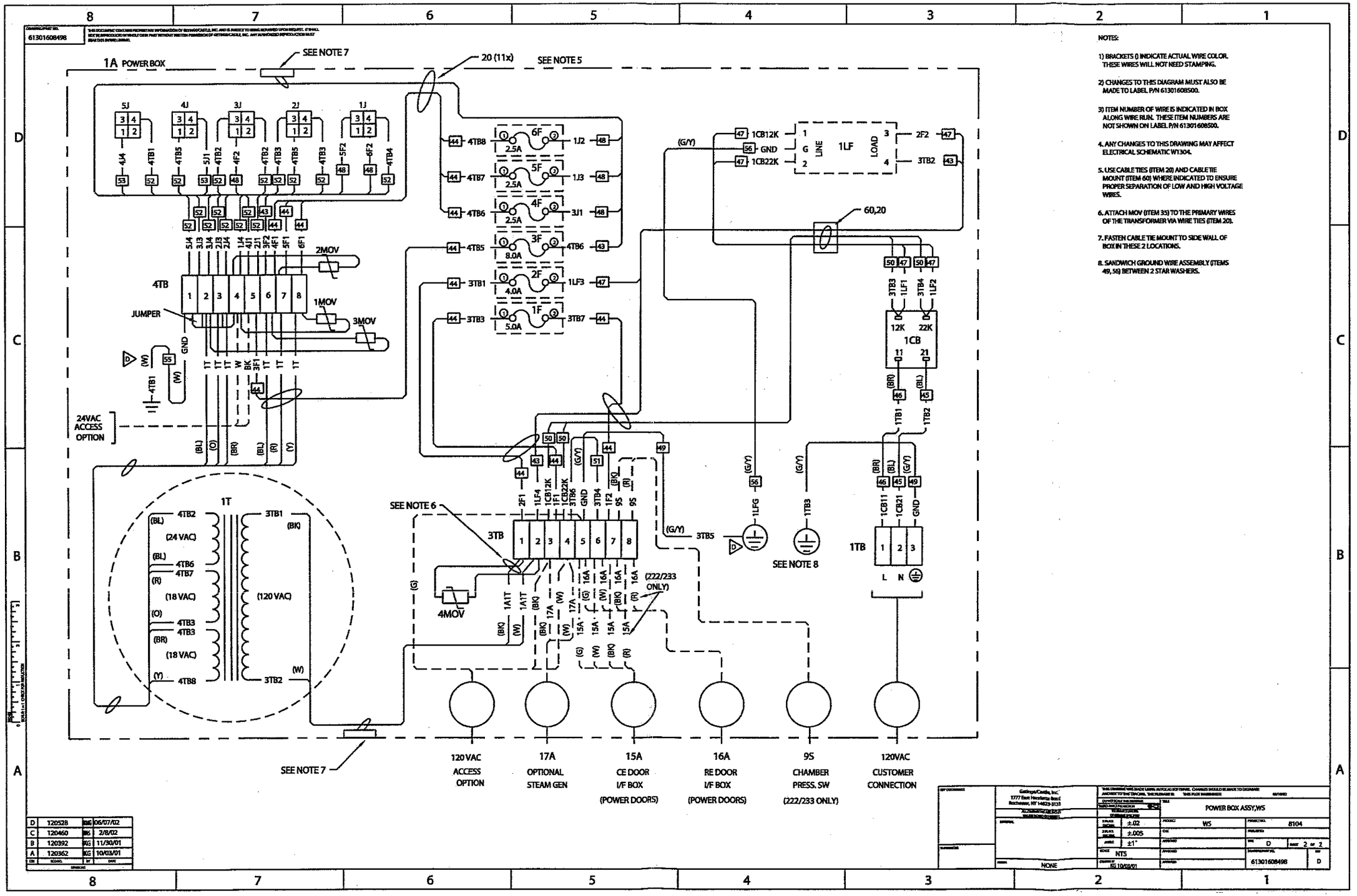
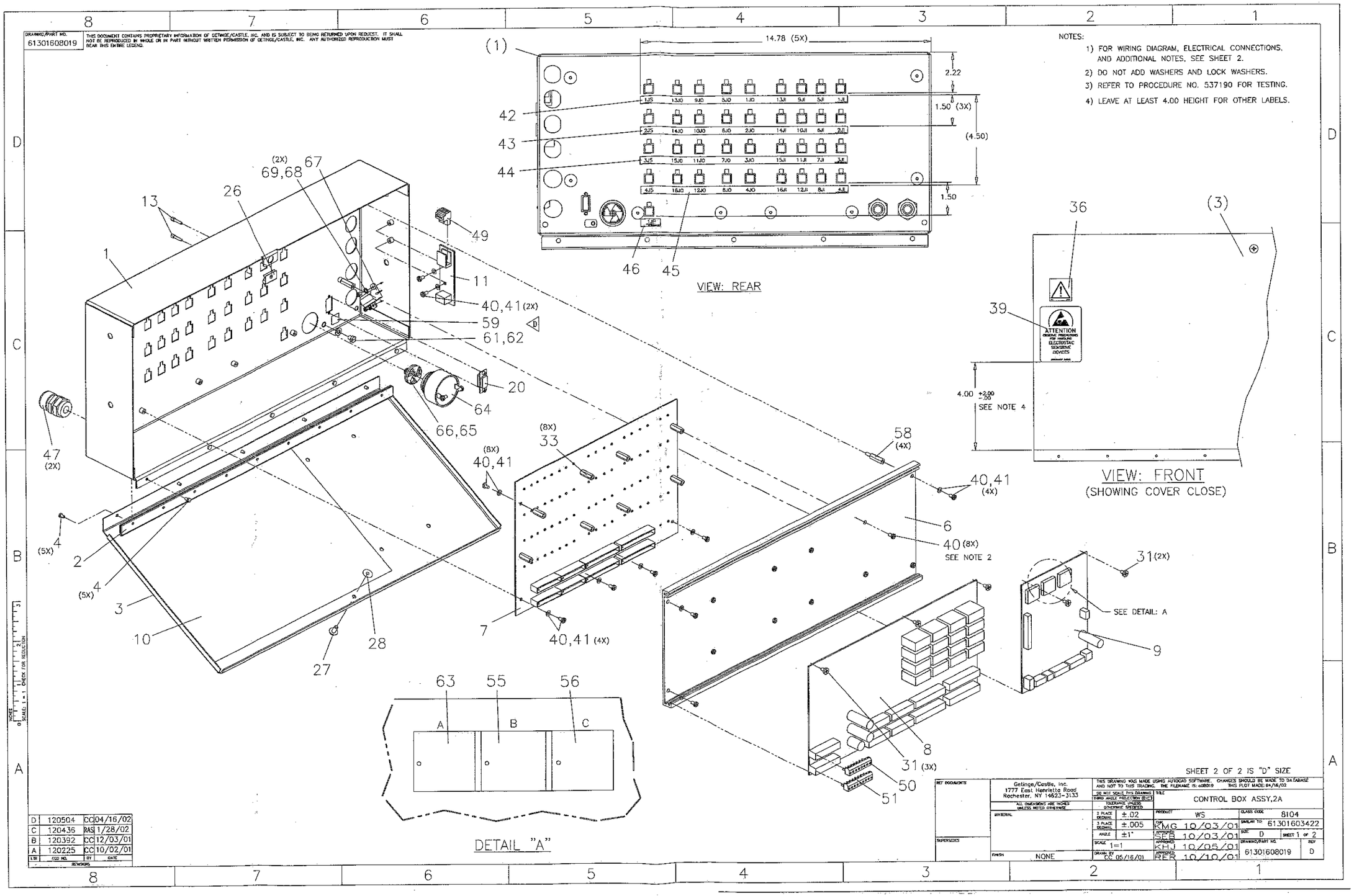

61301608498
1A POWER BOX
SEE NOTE 7
20 (11x)
SEE NOTE 5
5J
4J
3J
2J
1J
4TB
JUMPER
2MOV
1MOV
3MOV
GND
24VAC ACCESS OPTION
4TB8
4TB7
4TB6
4TB5
3TB1
3TB3
6F
5F
4F
3F
2F
1F
2.5A
2.5A
2.5A
8.0A
4.0A
5.0A
1J2
1J3
3J1
4TB6
1LF3
3TB7
1CB12K
GND
1CB22K
1LF
LINE
LOAD
2F2
3TB2
(G/Y)
60,20
12K
22K
1CB
1TB1
1TB2
1TB
L N
SEE NOTE 8
1LFG
3TB5
3TB
SEE NOTE 6
4MOV
1T
4TB2
(24 VAC)
4TB6
4TB7
(18 VAC)
4TB3
4TB3
(18 VAC)
4TB8
3TB1
(120 VAC)
3TB2
SEE NOTE 7
(222/233 ONLY)
120 VAC ACCESS OPTION
17A OPTIONAL STEAM GEN
15A CE DOOR I/F BOX (POWER DOORS)
16A RE DOOR I/F BOX (POWER DOORS)
9S CHAMBER PRESS. SW (222/233 ONLY)
120VAC CUSTOMER CONNECTION
NOTES:
1) BRACKETS () INDICATE ACTUAL WIRE COLOR. THESE WIRES WILL NOT NEED STAMPING.
2) CHANGES TO THIS DIAGRAM MUST ALSO BE MADE TO LABEL P/N 61301608500.
3) ITEM NUMBER OF WIRE IS INDICATED IN BOX ALONG WIRE RUN. THESE ITEM NUMBERS ARE NOT SHOWN ON LABEL P/N 61301608500.
4. ANY CHANGES TO THIS DRAWING MAY AFFECT ELECTRICAL SCHEMATIC W1304.
5. USE CABLE TIES (ITEM 20) AND CABLE TIE MOUNT (ITEM 60) WHERE INDICATED TO ENSURE PROPER SEPARATION OF LOW AND HIGH VOLTAGE WIRES.
6. ATTACH MOV (ITEM 35) TO THE PRIMARY WIRES OF THE TRANSFORMER VIA WIRE TIES (ITEM 20).
7. FASTEN CABLE TIE MOUNT TO SIDE WALL OF BOX IN THESE 2 LOCATIONS.
8. SANDWICH GROUND WIRE ASSEMBLY (ITEMS 49, 56) BETWEEN 2 STAR WASHERS.
D 120528 06/07/02
C 120460 2/8/02
B 120392 11/30/01
A 120362 10/03/01
Gettinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
POWER BOX ASSY,WS
WS
8104
NTS
NONE
61301608498
D
2 of 2

Figure 9–5. CONTROL BOX ASSEMBLY 2A (sheet 1 of 2)


DRAWING/PART NO. 61301608019
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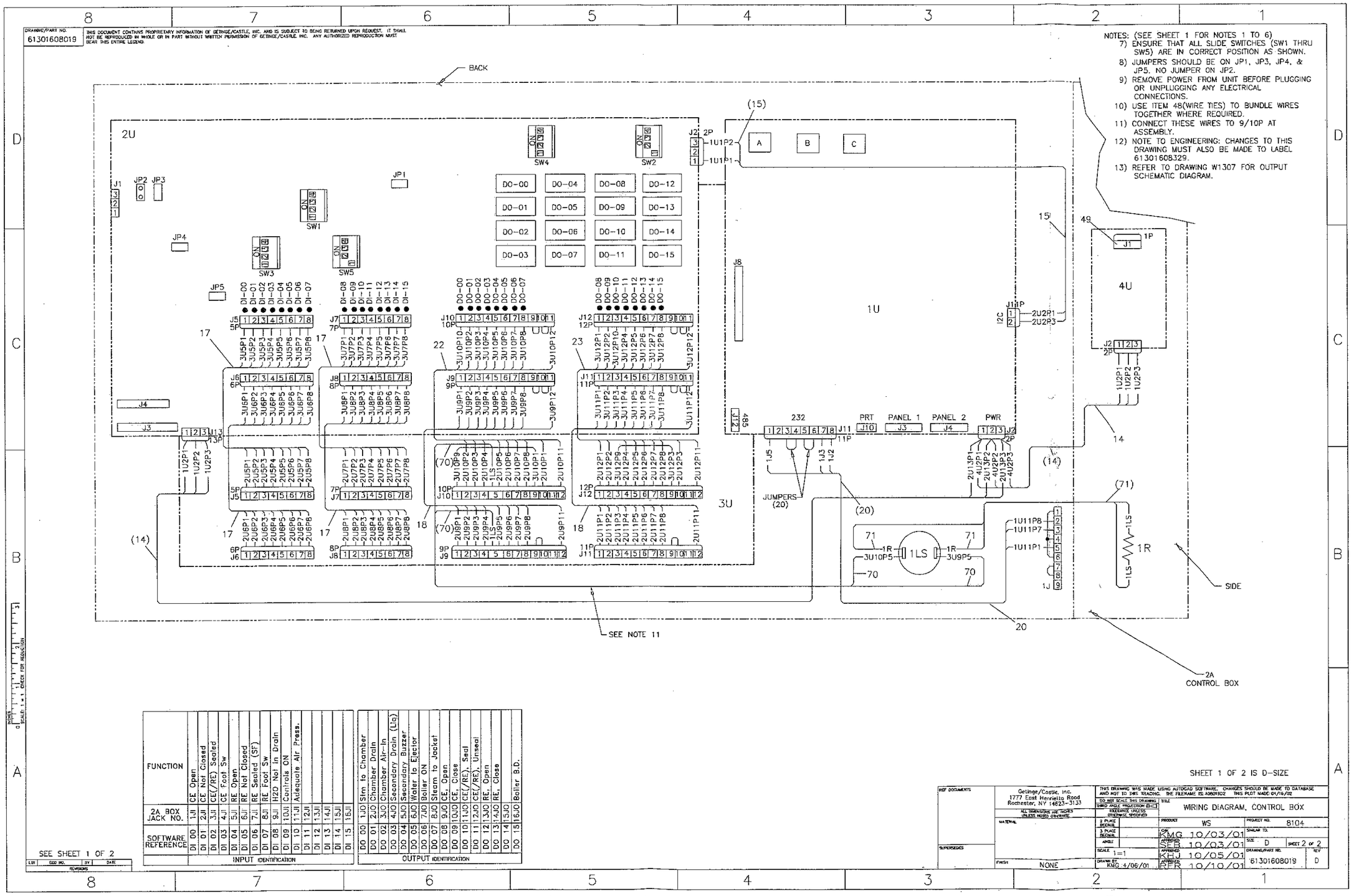
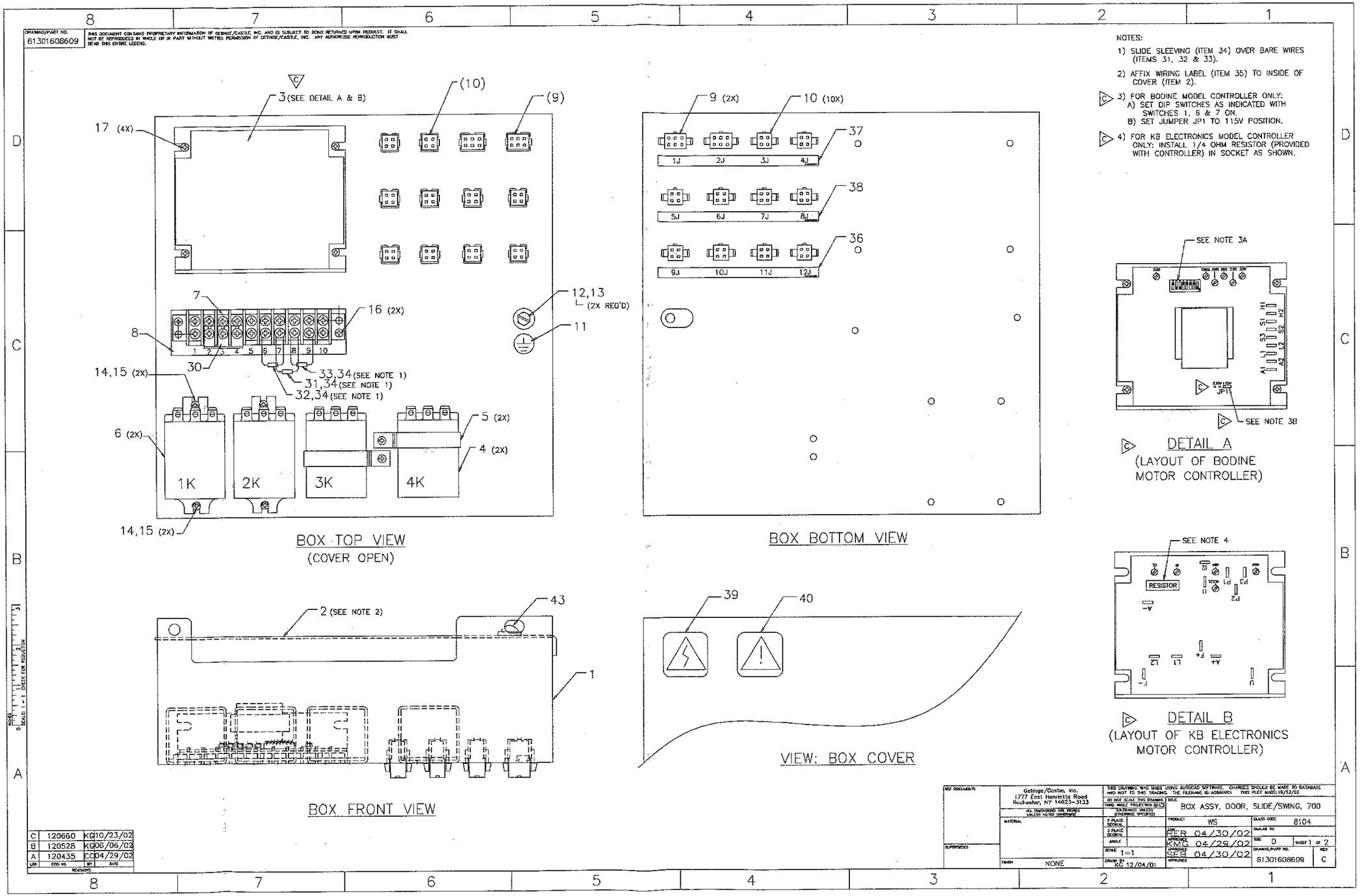
NOTES:
1) FOR WIRING DIAGRAM, ELECTRICAL CONNECTIONS, AND ADDITIONAL NOTES, SEE SHEET 2.
2) DO NOT ADD WASHERS AND LOCK WASHERS.
3) REFER TO PROCEDURE NO. 537190 FOR TESTING.
4) LEAVE AT LEAST 4.00 HEIGHT FOR OTHER LABELS.
VIEW: REAR
VIEW: FRONT
(SHOWING COVER CLOSE)
DETAIL "A"
SEE DETAIL: A
SEE NOTE 2
SEE NOTE 4
SHEET 2 OF 2 IS "D" SIZE
CONTROL BOX ASSY,2A
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
61301608019
REVISIONS
D 120504 CC 04/16/02
C 120435 RAS 1/28/02
B 120392 CC 12/03/01
A 120225 CC 10/02/01

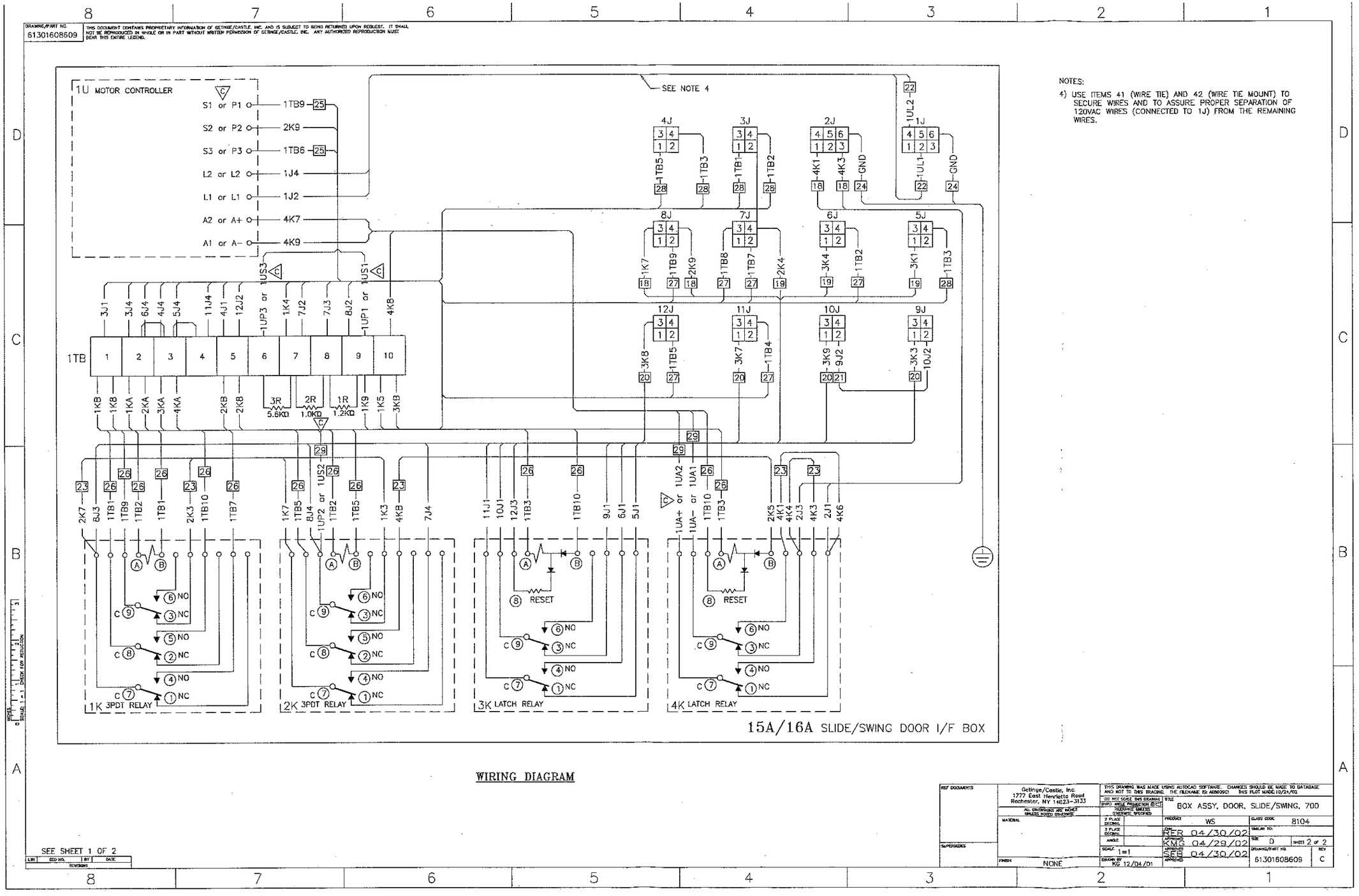


FUNCTION	CE Open	CE Not Closed	CE(/RE) Sealed	CE Foot Sw	RE Open	RE Not Closed	RE Sealed (SF)	RE Foot Sw	H2O Not In Drain	Controls ON	Adequate Air Press.					
2A BOX JACK NO.	1J1	2J1	3J1	4J1	5J1	6J1	7J1	8J1	9J1	10J1	11J1	12J1	13J1	14J1	15J1	16J1
SOFTWARE REFERENCE	DI 00	DI 01	DI 02	DI 03	DI 04	DI 05	DI 06	DI 07	DI 08	DI 09	DI 10	DI 11	DI 12	DI 13	DI 14	DI 15

Stm to Chamber	Chamber Drain	Chamber Air-In	Secondary Drain (Liq)	Secondary Buzzer	Water to Ejector	Boiler ON	Steam to Jacket	CE Open	CE Close	CE(/RE) Seal	CE(/RE) Unseal	RE Open	RE Close	Boiler B.D.		
1J0	2J0	3J0	4J0	5J0	6J0	7J0	8J0	9J0	10J0	11J0	12J0	13J0	14J0	15J0	16J0	
DO 00	DO 01	DO 02	DO 03	DO 04	DO 05	DO 06	DO 07	DO 08	DO 09	DO 10	DO 11	DO 12	DO 13	DO 14	DO 15	

Figure 9–6. DOOR I/F BOX ASSEMBLY 15A/16A (sheet 1 of 2)




DRAWING/PART NO. 61301608609
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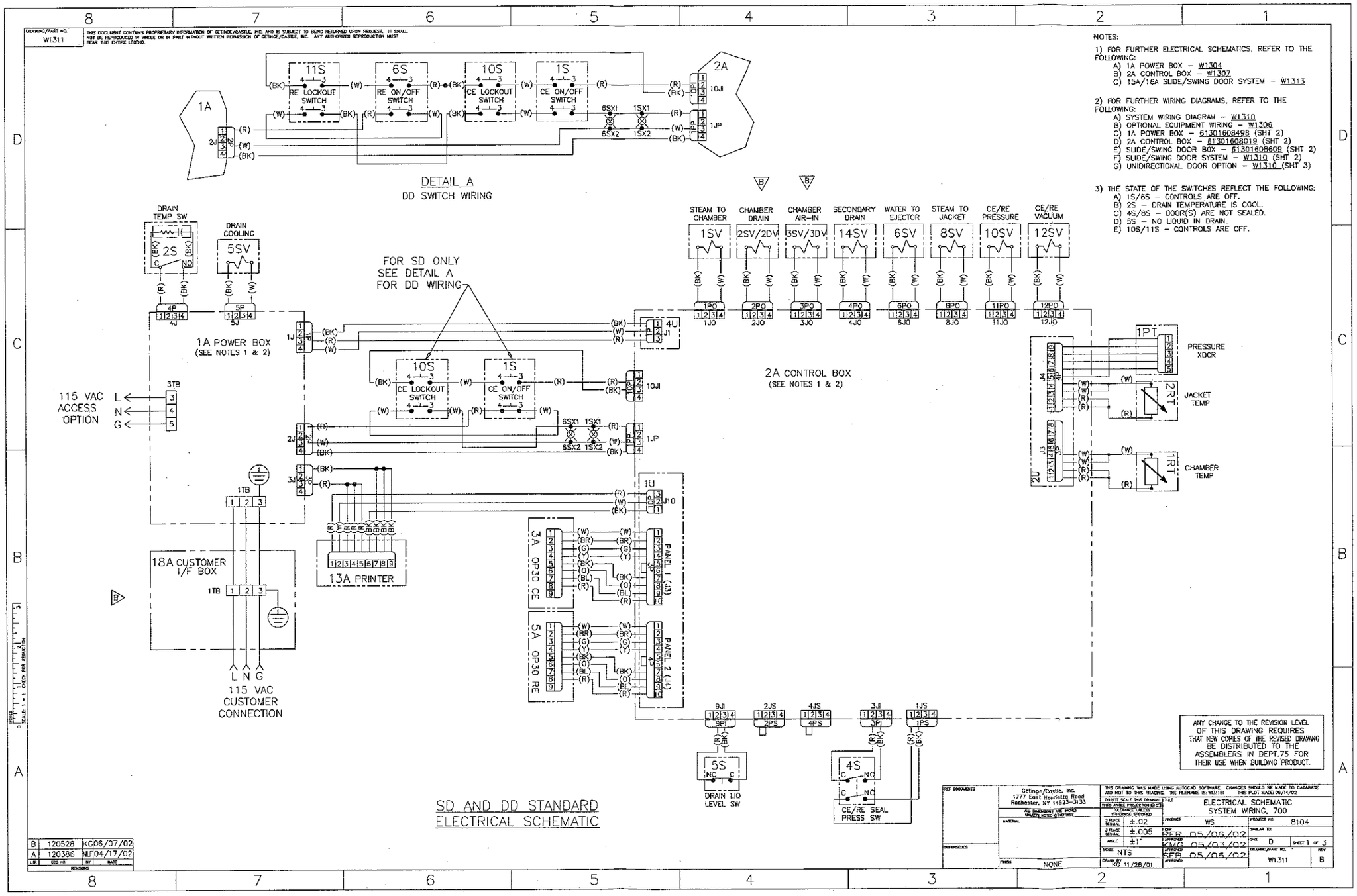
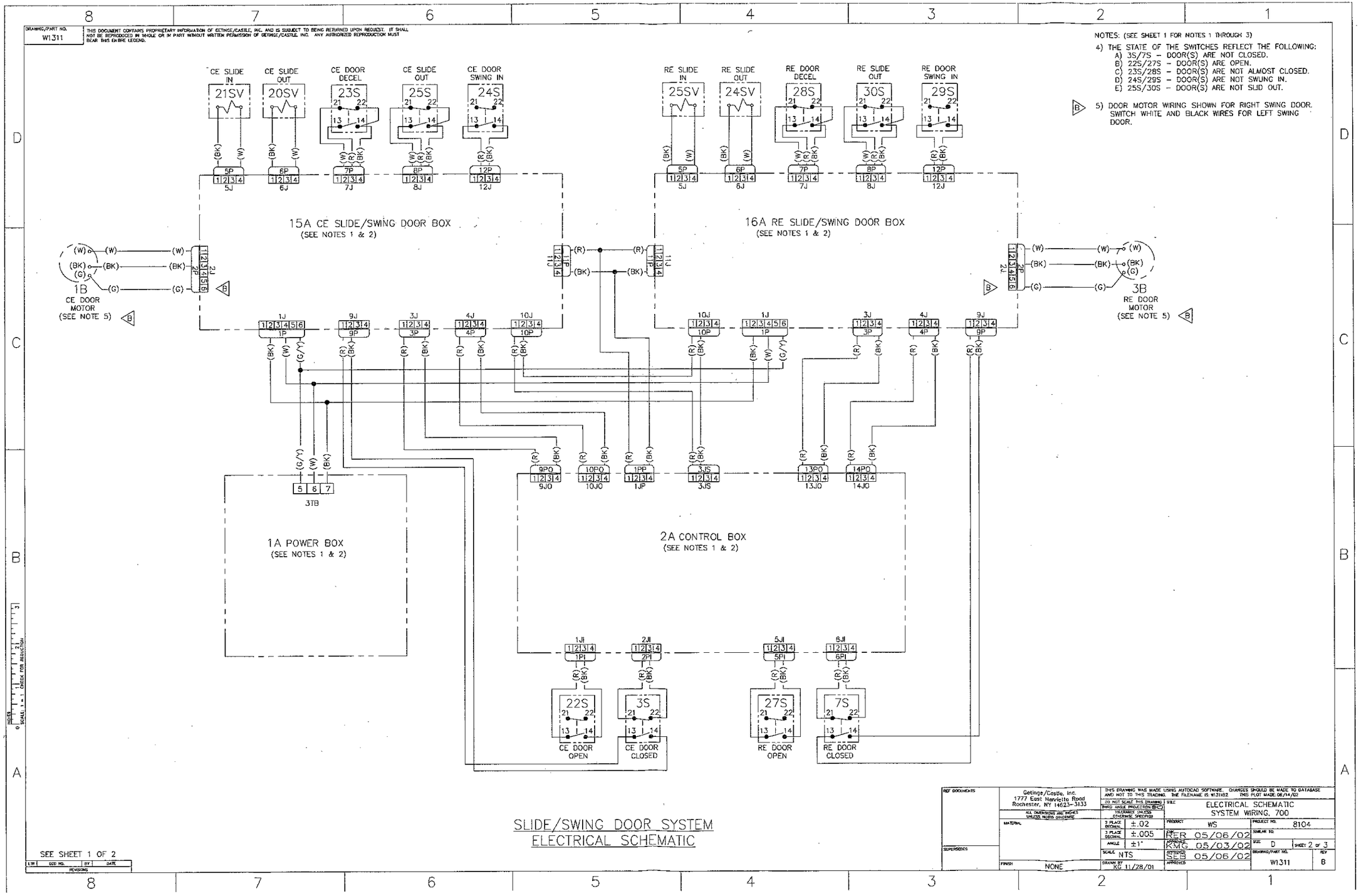
1U MOTOR CONTROLLER
S1 or P1
S2 or P2
S3 or P3
L2 or L2
L1 or L1
A2 or A+
A1 or A-
1TB9
2K9
1TB6
1J4
1J2
4K7
4K9
SEE NOTE 4
1TB
1K 3PDT RELAY
2K 3PDT RELAY
3K LATCH RELAY
4K LATCH RELAY
RESET
15A/16A SLIDE/SWING DOOR I/F BOX
NOTES:
4) USE ITEMS 41 (WIRE TIE) AND 42 (WIRE TIE MOUNT) TO SECURE WIRES AND TO ASSURE PROPER SEPARATION OF 120VAC WIRES (CONNECTED TO 1J) FROM THE REMAINING WIRES.
SEE SHEET 1 OF 2
WIRING DIAGRAM
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
BOX ASSY, DOOR, SLIDE/SWING, 700
WS
8104
SCALE 1=1
NONE
61301608609
C


NOTES:
1) FOR FURTHER ELECTRICAL SCHEMATICS, REFER TO THE FOLLOWING:
A) 1A POWER BOX – W1304
B) 2A CONTROL BOX – W1307
C) 15A/16A SLIDE/SWING DOOR SYSTEM – W1313
2) FOR FURTHER WIRING DIAGRAMS, REFER TO THE FOLLOWING:
A) SYSTEM WIRING DIAGRAM – W1310
B) OPTIONAL EQUIPMENT WIRING – W1306
C) 1A POWER BOX – 61301608498 (SHT 2)
D) 2A CONTROL BOX – 61301608019 (SHT 2)
E) SLIDE/SWING DOOR BOX – 61301608609 (SHT 2)
F) SLIDE/SWING DOOR SYSTEM – W1310 (SHT 2)
G) UNIDIRECTIONAL DOOR OPTION – W1310 (SHT 3)
3) THE STATE OF THE SWITCHES REFLECT THE FOLLOWING:
A) 1S/6S – CONTROLS ARE OFF.
B) 2S – DRAIN TEMPERATURE IS COOL.
C) 4S/8S – DOOR(S) ARE NOT SEALED.
D) 5S – NO LIQUID IN DRAIN.
E) 10S/11S – CONTROLS ARE OFF.
DETAIL A
DD SWITCH WIRING
FOR SD ONLY SEE DETAIL A FOR DD WIRING
1A POWER BOX (SEE NOTES 1 & 2)
2A CONTROL BOX (SEE NOTES 1 & 2)
115 VAC ACCESS OPTION
115 VAC CUSTOMER CONNECTION
18A CUSTOMER I/F BOX
13A PRINTER
3A OP3D CE
5A OP3D RE
PANEL 1 (J3)
PANEL 2 (J4)
DRAIN LID LEVEL SW
CE/RE SEAL PRESS SW
PRESSURE XDCR
JACKET TEMP
CHAMBER TEMP
SD AND DD STANDARD ELECTRICAL SCHEMATIC
ANY CHANGE TO THE REVISION LEVEL OF THIS DRAWING REQUIRES THAT NEW COPIES OF THE REVISED DRAWING BE DISTRIBUTED TO THE ASSEMBLERS IN DEPT.75 FOR THEIR USE WHEN BUILDING PRODUCT.
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
ELECTRICAL SCHEMATIC
SYSTEM WIRING, 700
W1311
B 120528 KG 06/07/02
A 120386 MLF 04/17/02


DRAWING/PART NO. W1311
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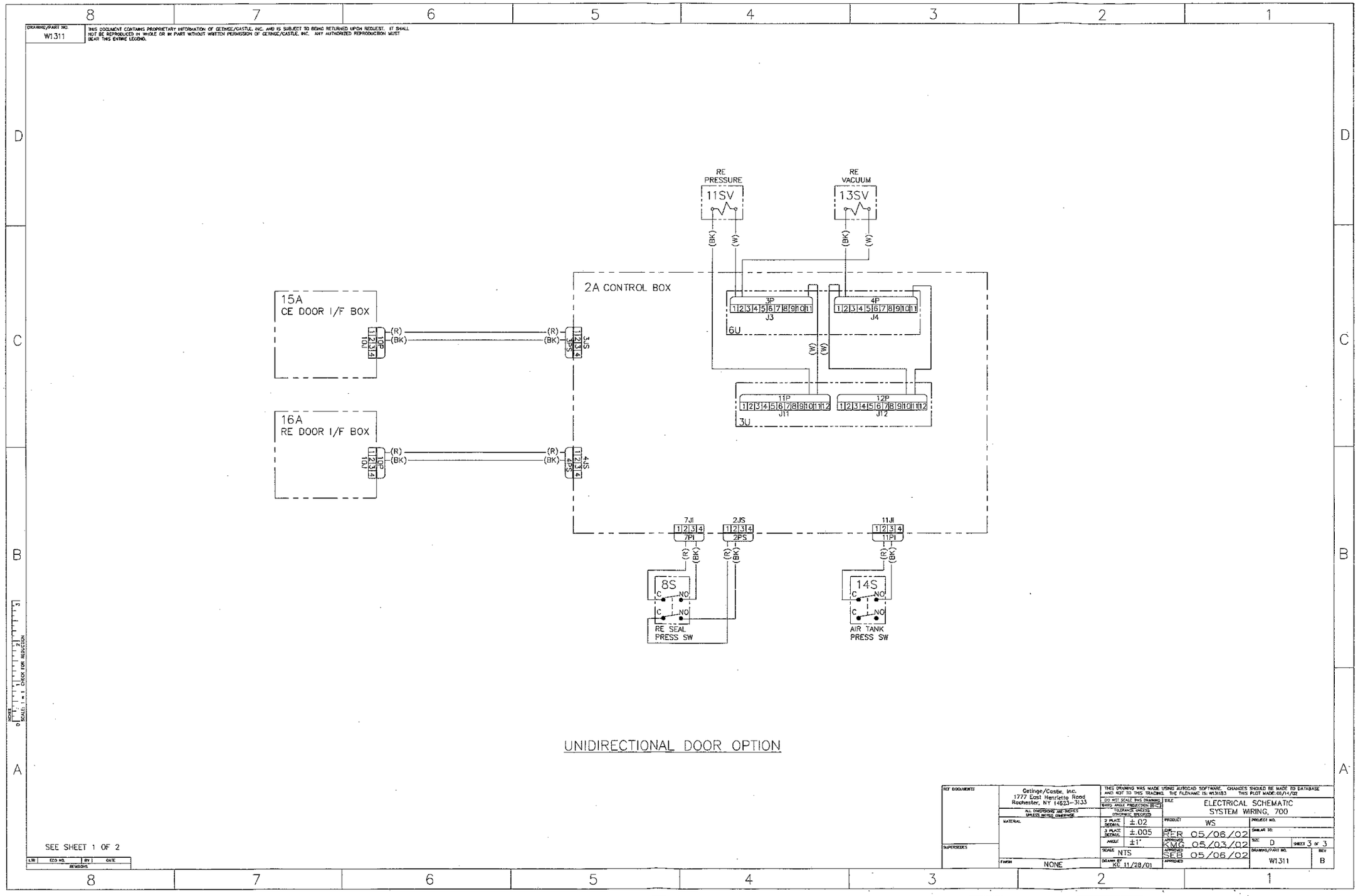
NOTES: (SEE SHEET 1 FOR NOTES 1 THROUGH 3)
4) THE STATE OF THE SWITCHES REFLECT THE FOLLOWING:
A) 3S/7S – DOOR(S) ARE NOT CLOSED.
B) 22S/27S – DOOR(S) ARE OPEN.
C) 23S/28S – DOOR(S) ARE NOT ALMOST CLOSED.
D) 24S/29S – DOOR(S) ARE NOT SWUNG IN.
E) 25S/30S – DOOR(S) ARE NOT SLID OUT.
5) DOOR MOTOR WIRING SHOWN FOR RIGHT SWING DOOR. SWITCH WHITE AND BLACK WIRES FOR LEFT SWING DOOR.
CE SLIDE IN 21SV
CE SLIDE OUT 20SV
CE DOOR DECEL 23S
CE SLIDE OUT 25S
CE DOOR SWING IN 24S
RE SLIDE IN 25SV
RE SLIDE OUT 24SV
RE DOOR DECEL 28S
RE SLIDE OUT 30S
RE DOOR SWING IN 29S
15A CE SLIDE/SWING DOOR BOX
(SEE NOTES 1 & 2)
16A RE SLIDE/SWING DOOR BOX
(SEE NOTES 1 & 2)
1B CE DOOR MOTOR (SEE NOTE 5)
3B RE DOOR MOTOR (SEE NOTE 5)
1A POWER BOX
(SEE NOTES 1 & 2)
2A CONTROL BOX
(SEE NOTES 1 & 2)
22S CE DOOR OPEN
3S CE DOOR CLOSED
27S RE DOOR OPEN
7S RE DOOR CLOSED
SLIDE/SWING DOOR SYSTEM
ELECTRICAL SCHEMATIC
SEE SHEET 1 OF 2
Getinge/Castle, Inc. 1777 East Henrietta Road Rochester, NY 14623–3133
ELECTRICAL SCHEMATIC SYSTEM WIRING, 700
W1311
SHEET 2 of 3


DRAWING/PART NO. W1311
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RE PRESSURE
11SV
RE VACUUM
13SV
(BK)
(W)
2A CONTROL BOX
15A
CE DOOR I/F BOX
16A
RE DOOR I/F BOX
10P
10J
(R)
(BK)
3JS
3PS
4JS
4PS
3P
J3
4P
J4
6U
11P
J11
12P
J12
3U
7JI
7PI
2JS
2PS
11JI
11PI
8S
14S
C
NO
RE SEAL PRESS SW
AIR TANK PRESS SW
UNIDIRECTIONAL DOOR OPTION
SEE SHEET 1 OF 2
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
ELECTRICAL SCHEMATIC
SYSTEM WIRING, 700
WS
TER 05/06/02
KMG 05/03/02
SEB 05/06/02
W1311
B
SHEET 3 OF 3
NONE
NTS

DRAWING/PART NO.
W1304

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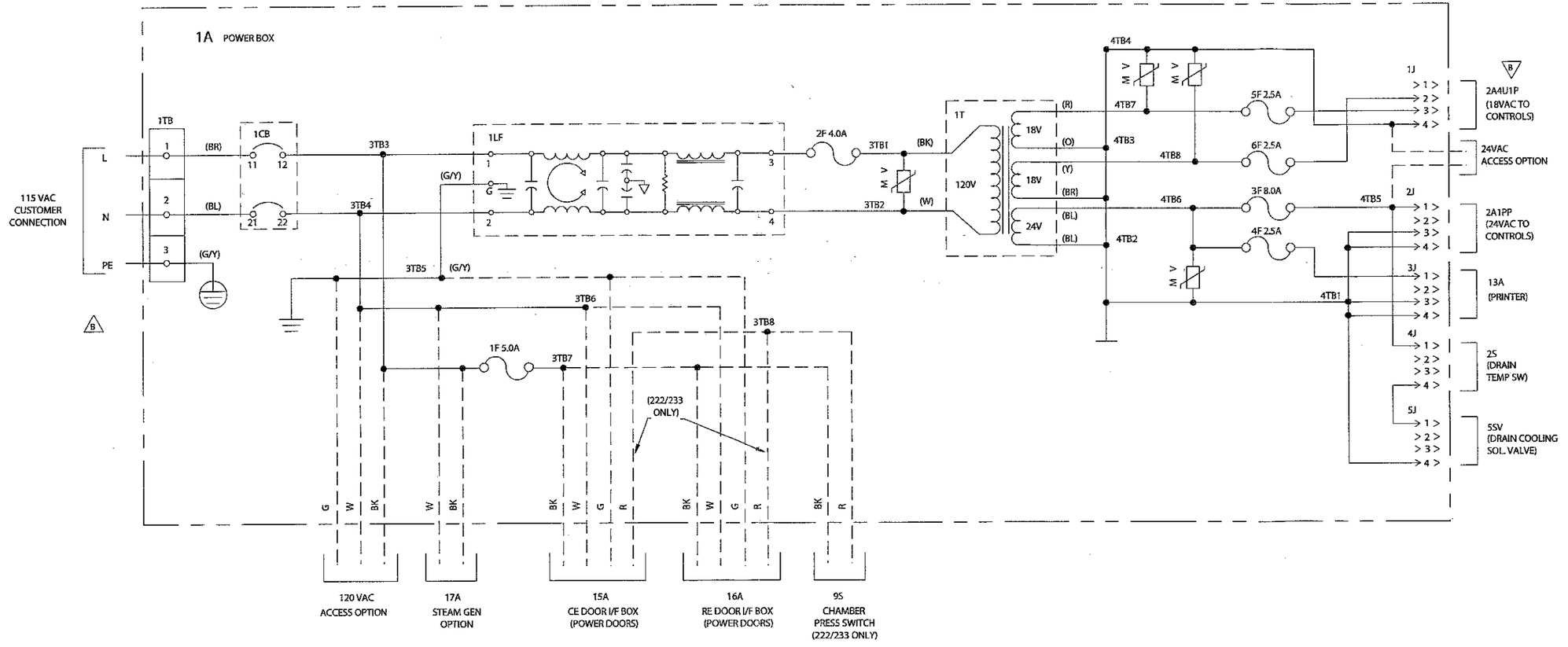


LTR	ECO NO.	BY	DATE
B	120392	KG	12/03/01
A	120219	RR	9/24/01

REVISIONS

SCALE: 1 = 1 CHECK FOR REDUCTION

REF DOCUMENTS

SUPERSEDES

Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133

ALL DIMENSIONS ARE INCHES UNLESS NOTED OTHERWISE

MATERIAL

FINISH: NONE

THIS DRAWING WAS MADE USING AUTOCAD SOFTWARE. CHANGES SHOULD BE MADE TO DATABASE AND NOT TO THIS TRACING. THE FILENAME IS: THIS PLOT MADE 304-B1.dwg 12/03/01

DO NOT SCALE THIS DRAWING
THIRD ANGLE PROJECTION

TOLERANCE UNLESS OTHERWISE SPECIFIED

2 PLACE DECIMAL	±.02
3 PLACE DECIMAL	±.005
ANGLE	±1°

SCALE: NTS

DRAWN BY: KG 04/04/01

TITLE: ELECTRICAL SCHEMATIC POWER BOX

PRODUCT: WS

CHK: CDC 10/01/01

APPROVED

APPROVED

APPROVED

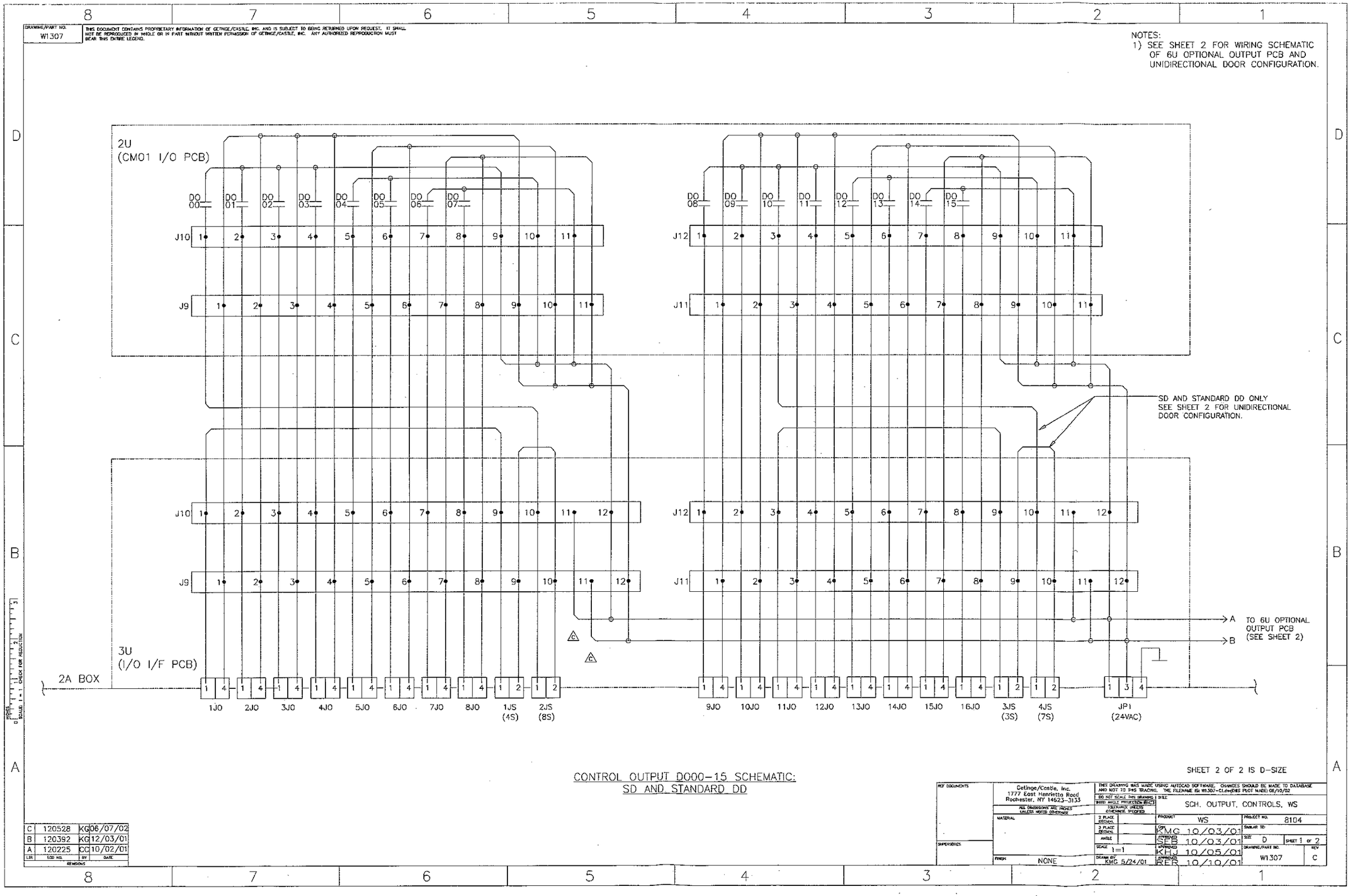
PROJECT NO.: 8104

SIMILAR TO:

SIZE: B SHEET 1 OF 1

DRAWING/PART NO.: W1304

REV: B


DRAWING/PART NO. W1307
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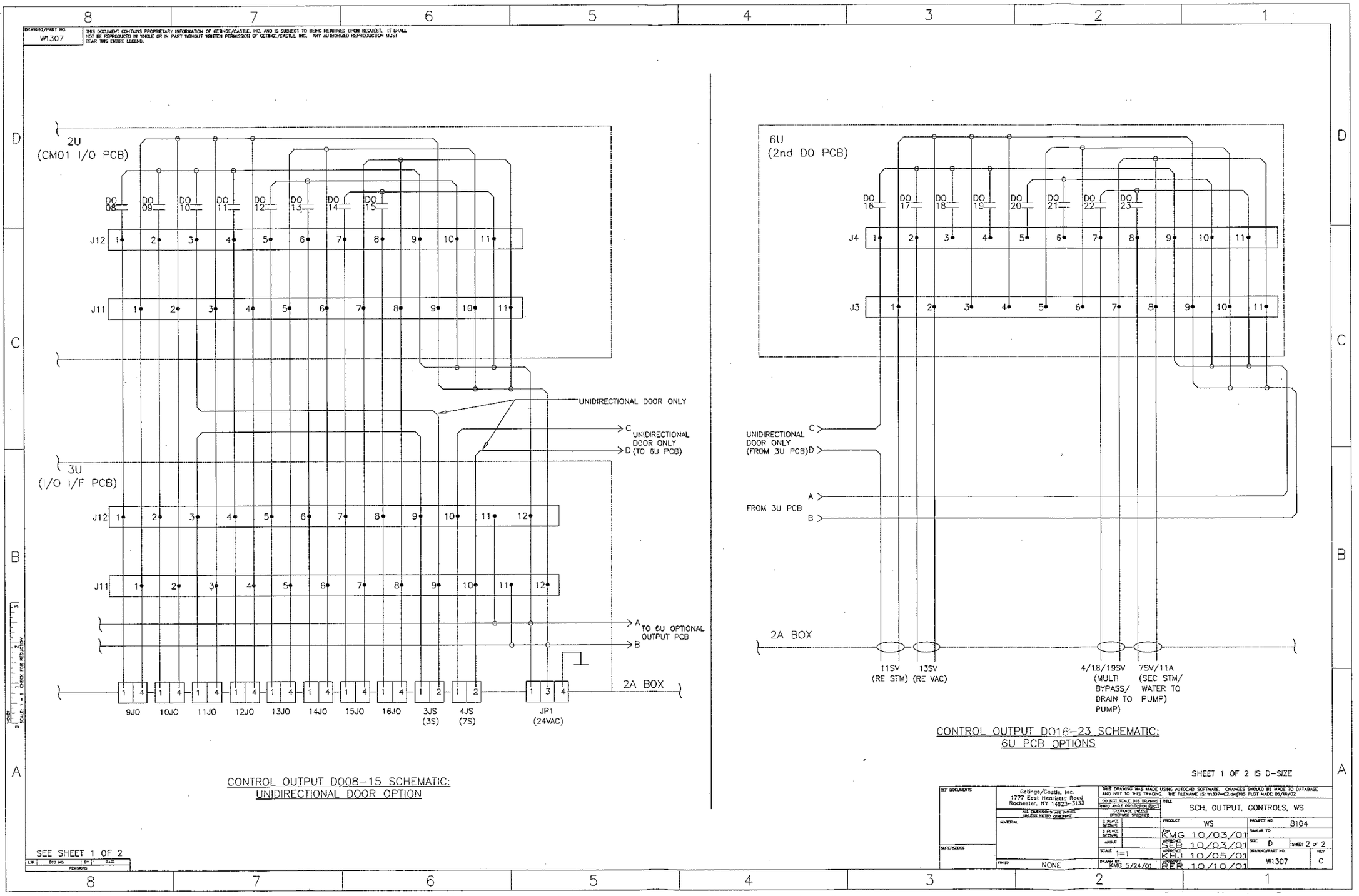
NOTES:
1) SEE SHEET 2 FOR WIRING SCHEMATIC OF 6U OPTIONAL OUTPUT PCB AND UNIDIRECTIONAL DOOR CONFIGURATION.
2U
(CM01 I/O PCB)
DO 00
DO 01
DO 02
DO 03
DO 04
DO 05
DO 06
DO 07
DO 08
DO 09
DO 10
DO 11
DO 12
DO 13
DO 14
DO 15
J10
J9
J12
J11
SD AND STANDARD DD ONLY
SEE SHEET 2 FOR UNIDIRECTIONAL
DOOR CONFIGURATION.
3U
(I/O I/F PCB)
2A BOX
A
B
TO 6U OPTIONAL
OUTPUT PCB
(SEE SHEET 2)
1JO
2JO
3JO
4JO
5JO
6JO
7JO
8JO
1JS
(4S)
2JS
(8S)
9JO
10JO
11JO
12JO
13JO
14JO
15JO
16JO
3JS
(3S)
4JS
(7S)
JP1
(24VAC)
CONTROL OUTPUT D000–15 SCHEMATIC:
SD AND STANDARD DD
SHEET 2 OF 2 IS D-SIZE
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
SCH. OUTPUT, CONTROLS, WS
WS
8104
W1307
C 120528 KG 06/07/02
B 120392 KG 12/03/01
A 120225 CC 10/02/01


DRAWING/PART NO. W1307
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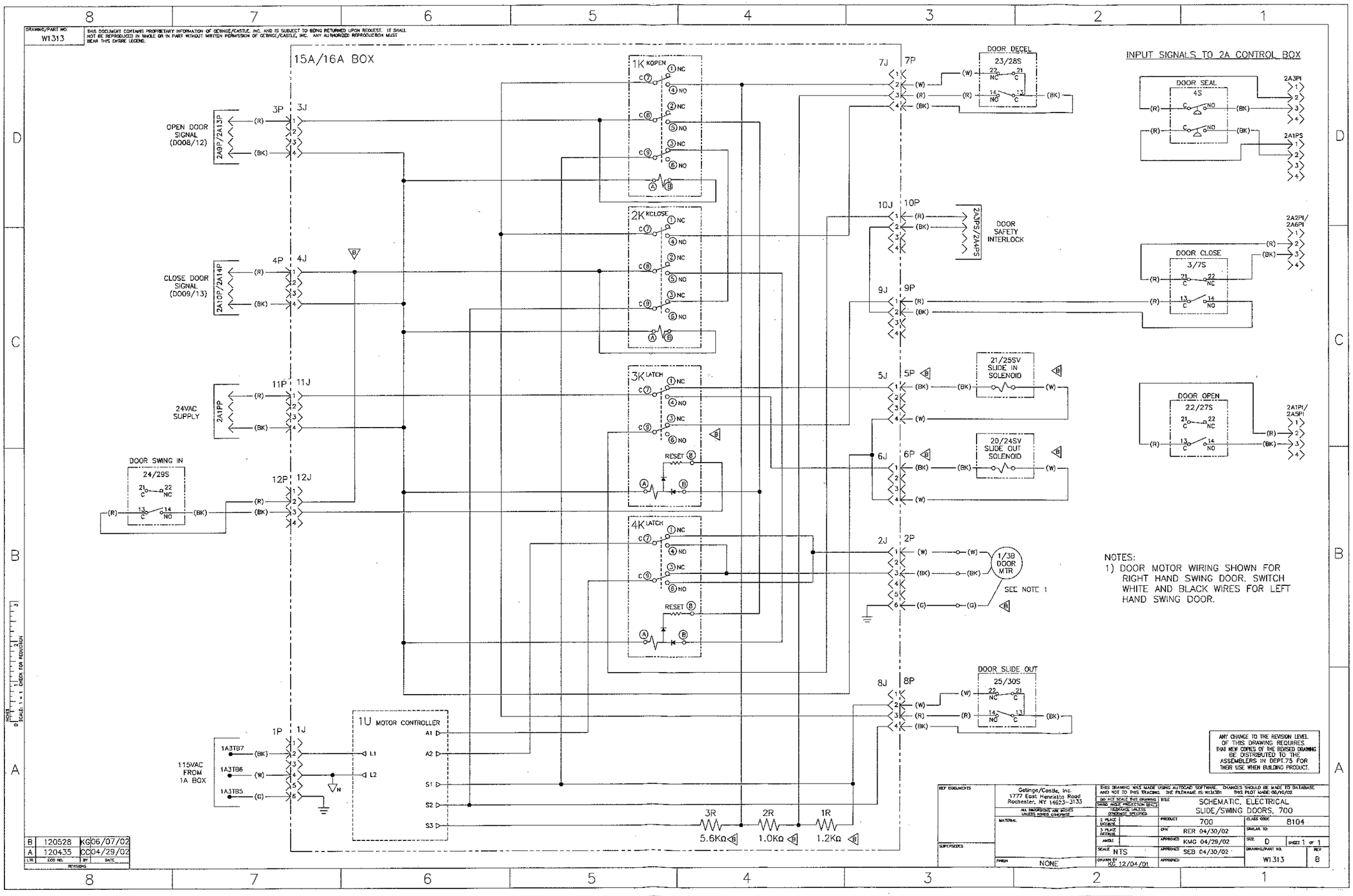
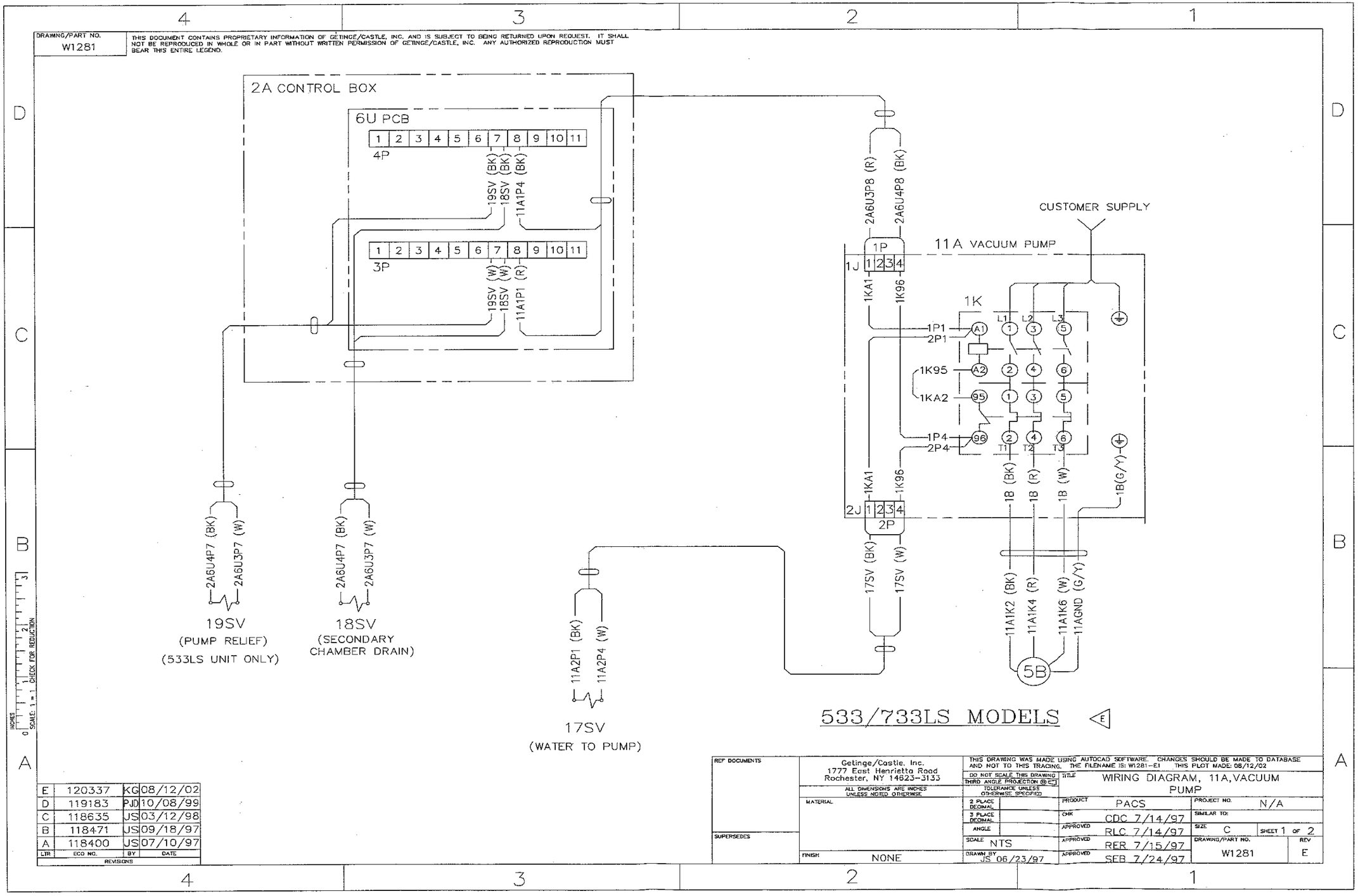
2U
(CM01 I/O PCB)
DO 08
DO 09
DO 10
DO 11
DO 12
DO 13
DO 14
DO 15
J12
J11
UNIDIRECTIONAL DOOR ONLY
C UNIDIRECTIONAL DOOR ONLY
D (TO 6U PCB)
3U
(I/O I/F PCB)
J12
J11
A TO 6U OPTIONAL OUTPUT PCB
B
2A BOX
9JO
10JO
11JO
12JO
13JO
14JO
15JO
16JO
3JS (3S)
4JS (7S)
JP1 (24VAC)
CONTROL OUTPUT DO08–15 SCHEMATIC: UNIDIRECTIONAL DOOR OPTION
SEE SHEET 1 OF 2
6U
(2nd DO PCB)
DO 16
DO 17
DO 18
DO 19
DO 20
DO 21
DO 22
DO 23
J4
J3
UNIDIRECTIONAL DOOR ONLY (FROM 3U PCB)
C
D
FROM 3U PCB
A
B
2A BOX
11SV (RE STM)
13SV (RE VAC)
4/18/19SV (MULTI BYPASS/ DRAIN TO PUMP)
7SV/11A (SEC STM/ WATER TO PUMP)
CONTROL OUTPUT DO16–23 SCHEMATIC: 6U PCB OPTIONS
SHEET 1 OF 2 IS D-SIZE
Getinge/Castle, inc. 1777 East Henrietta Road Rochester, NY 14623-3133
THIS DRAWING WAS MADE USING AUTOCAD SOFTWARE. CHANGES SHOULD BE MADE TO DATABASE AND NOT TO THIS DRAWING. THE FILENAME IS: W1307-C2.dwg THIS PLOT MADE: 05/16/02
DO NOT SCALE THIS DRAWING
THIRD ANGLE PROJECTION
TOLERANCE UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE INCHES UNLESS NOTED OTHERWISE
MATERIAL
NONE
SCALE 1=1
DRAWN BY KMG 5/24/01
TITLE SCH. OUTPUT, CONTROLS, WS
PRODUCT WS
PROJECT NO. 8104
CHK KMG 10/03/01
SIMILAR TO
APPROVED SEB 10/03/01
SIZE D
SHEET 2 OF 2
APPROVED KHJ 10/05/01
DRAWING/PART NO. W1307
REV C
APPROVED RER 10/10/01
REVISIONS
LTR ECO NO. BY DATE
SUPERSEDES


15A/16A BOX
1K KOPEN
2K KCLOSE
3K LATCH
4K LATCH
RESET
OPEN DOOR SIGNAL (D008/12)
CLOSE DOOR SIGNAL (D009/13)
24VAC SUPPLY
DOOR SWING IN
24/29S
115VAC FROM 1A BOX
1U MOTOR CONTROLLER
A1
A2
S1
S2
S3
3R 5.6KΩ
2R 1.0KΩ
1R 1.2KΩ
DOOR DECEL
23/28S
DOOR SEAL
4S
DOOR SAFETY INTERLOCK
DOOR CLOSE
3/7S
21/25SV SLIDE IN SOLENOID
20/24SV SLIDE OUT SOLENOID
DOOR OPEN
22/27S
1/3B DOOR MTR
SEE NOTE 1
DOOR SLIDE OUT
25/30S
INPUT SIGNALS TO 2A CONTROL BOX
NOTES:
1) DOOR MOTOR WIRING SHOWN FOR RIGHT HAND SWING DOOR. SWITCH WHITE AND BLACK WIRES FOR LEFT HAND SWING DOOR.
ANY CHANGE TO THE REVISION LEVEL OF THIS DRAWING REQUIRES THAT NEW COPIES OF THE REVISED DRAWING BE DISTRIBUTED TO THE ASSEMBLERS IN DEPT.75 FOR THEIR USE WHEN BUILDING PRODUCT.
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
SCHEMATIC, ELECTRICAL
SLIDE/SWING DOORS, 700
W1313
B 120528 KG 06/07/02
A 120435 CC 04/29/02


DRAWING/PART NO. W1281
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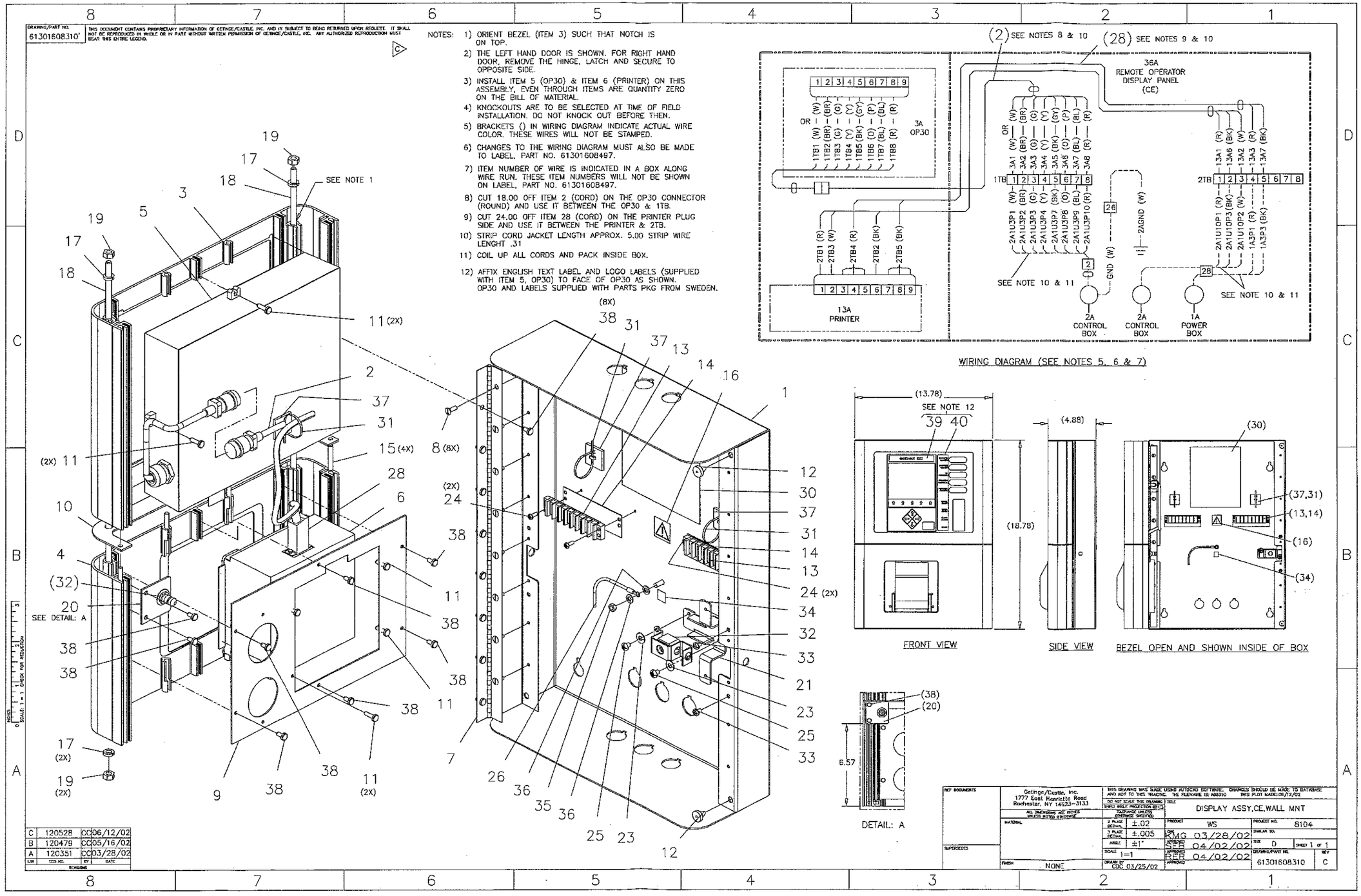
2A CONTROL BOX
6U PCB
4P
3P
19SV (BK)
18SV (BK)
11A1P4 (BK)
19SV (W)
18SV (W)
11A1P1 (R)
2A6U3P8 (R)
2A6U4P8 (BK)
CUSTOMER SUPPLY
11A VACUUM PUMP
1P
1J
1KA1
1K96
1K
1P1
2P1
1K95
1KA2
1P4
2P4
2J
2P
2A6U4P7 (BK)
2A6U3P7 (W)
19SV
(PUMP RELIEF)
(533LS UNIT ONLY)
18SV
(SECONDARY CHAMBER DRAIN)
11A2P1 (BK)
11A2P4 (W)
17SV
(WATER TO PUMP)
17SV (BK)
17SV (W)
1B (BK)
1B (R)
1B (W)
1B(G/Y)
11A1K2 (BK)
11A1K4 (R)
11A1K6 (W)
11AGND (G/Y)
5B
533/733LS MODELS
E 120337 KG 08/12/02
D 119183 PJD 10/08/99
C 118635 JS 03/12/98
B 118471 JS 09/18/97
A 118400 JS 07/10/97
LTR ECO NO. BY DATE
REVISIONS
Getinge/Castle, Inc.
1777 East Henrietta Road
Rochester, NY 14623-3133
THIS DRAWING WAS MADE USING AUTOCAD SOFTWARE. CHANGES SHOULD BE MADE TO DATABASE AND NOT TO THIS TRACING. THE FILENAME IS: W1281-E1 THIS PLOT MADE: 08/12/02
DO NOT SCALE THIS DRAWING
THIRD ANGLE PROJECTION
ALL DIMENSIONS ARE INCHES UNLESS NOTED OTHERWISE
TOLERANCE UNLESS OTHERWISE SPECIFIED
MATERIAL
2 PLACE DECIMAL
3 PLACE DECIMAL
ANGLE
SCALE NTS
FINISH NONE
DRAWN BY JS 06/23/97
TITLE WIRING DIAGRAM, 11A, VACUUM PUMP
PRODUCT PACS
CHK CDC 7/14/97
APPROVED RLC 7/14/97
APPROVED RER 7/15/97
APPROVED SEB 7/24/97
PROJECT NO. N/A
SIMILAR TO:
SIZE C
SHEET 1 OF 2
DRAWING/PART NO. W1281
REV E
SUPERSEDES
SCALE: 1 = 1 CHECK FOR REDUCTION


DRAWING/PART NO. 61301608310
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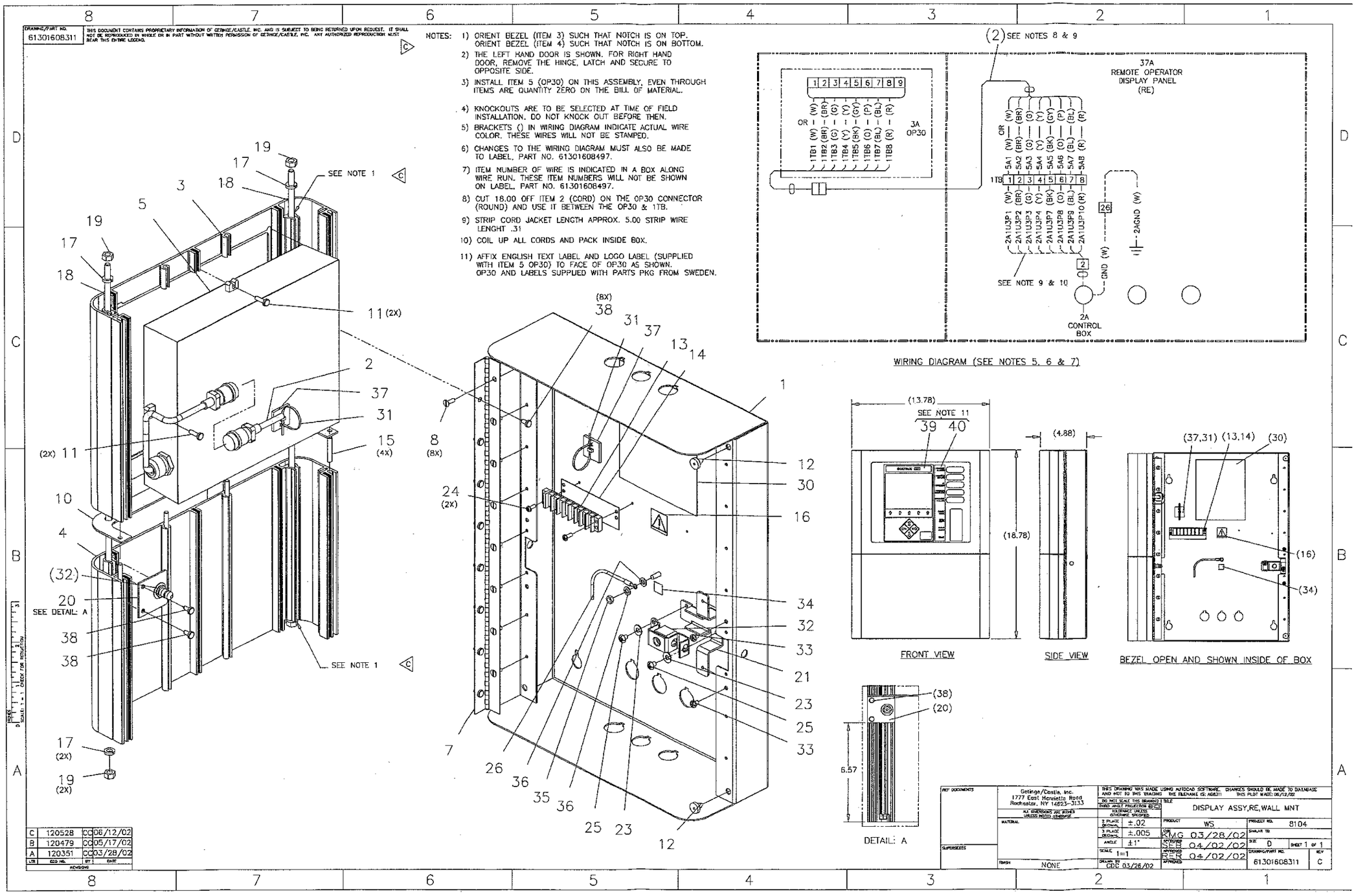
NOTES:
1) ORIENT BEZEL (ITEM 3) SUCH THAT NOTCH IS ON TOP.
2) THE LEFT HAND DOOR IS SHOWN. FOR RIGHT HAND DOOR, REMOVE THE HINGE, LATCH AND SECURE TO OPPOSITE SIDE.
3) INSTALL ITEM 5 (OP30) & ITEM 6 (PRINTER) ON THIS ASSEMBLY, EVEN THROUGH ITEMS ARE QUANTITY ZERO ON THE BILL OF MATERIAL.
4) KNOCKOUTS ARE TO BE SELECTED AT TIME OF FIELD INSTALLATION. DO NOT KNOCK OUT BEFORE THEN.
5) BRACKETS () IN WIRING DIAGRAM INDICATE ACTUAL WIRE COLOR. THESE WIRES WILL NOT BE STAMPED.
6) CHANGES TO THE WIRING DIAGRAM MUST ALSO BE MADE TO LABEL, PART NO. 61301608497.
7) ITEM NUMBER OF WIRE IS INDICATED IN A BOX ALONG WIRE RUN. THESE ITEM NUMBERS WILL NOT BE SHOWN ON LABEL, PART NO. 61301608497.
8) CUT 18.00 OFF ITEM 2 (CORD) ON THE OP30 CONNECTOR (ROUND) AND USE IT BETWEEN THE OP30 & 1TB.
9) CUT 24.00 OFF ITEM 28 (CORD) ON THE PRINTER PLUG SIDE AND USE IT BETWEEN THE PRINTER & 2TB.
10) STRIP CORD JACKET LENGTH APPROX. 5.00 STRIP WIRE LENGHT .31
11) COIL UP ALL CORDS AND PACK INSIDE BOX.
12) AFFIX ENGLISH TEXT LABEL AND LOGO LABELS (SUPPLIED WITH ITEM 5, OP30) TO FACE OF OP30 AS SHOWN. OP30 AND LABELS SUPPLIED WITH PARTS PKG FROM SWEDEN.
(2) SEE NOTES 8 & 10
(28) SEE NOTES 9 & 10
36A REMOTE OPERATOR DISPLAY PANEL (CE)
3A OP30
13A PRINTER
1TB
2TB
SEE NOTE 10 & 11
2A CONTROL BOX
2A CONTROL BOX
1A POWER BOX
2AGND (W)
END (W)
WIRING DIAGRAM (SEE NOTES 5, 6 & 7)
SEE NOTE 1
(8X)
(2X) 11
(4X) 15
(2X) 24
SEE DETAIL: A
(13.78)
SEE NOTE 12
39 40
(18.78)
(4.88)
(30)
(37,31)
(13,14)
(16)
(34)
FRONT VIEW
SIDE VIEW
BEZEL OPEN AND SHOWN INSIDE OF BOX
(38)
(20)
6.57
DETAIL: A
C 120528 CC06/12/02
B 120479 CC05/16/02
A 120351 CC03/28/02
REVISIONS
Getinge/Castle, Inc. 1777 East Henrietta Road Rochester, NY 14623-3133
THIS DRAWING WAS MADE USING AUTOCAD SOFTWARE. CHANGES SHOULD BE MADE TO DATABASE AND NOT TO THIS TRACING. THE FILENAME IS A00310
THIS PLOT MADE ON 7/3/02
DO NOT SCALE THIS DRAWING
SINGLE ANGLE PROJECTION
TOLERANCE UNLESS OTHERWISE SPECIFIED:
2 PLACE DECIMAL ±.02
3 PLACE DECIMAL ±.005
ANGLE ±1°
SCALE 1=1
MATERIAL
FINISH NONE
DRAWN BY CDC 03/25/02
TITLE DISPLAY ASSY,CE,WALL MNT
PRODUCT WS
PROJECT NO. 8104
CHK'D KMG 03/28/02
APPROVED STB 04/02/02
SIZE D
SHEET 1 OF 1
APPROVED STB 04/02/02
DRAWING/PART NO. 61301608310
REV C
SUPERSEDES
NEXT ASSY
USED ON


DRAWING/PART NO. 61301608311
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NOTES:
1) ORIENT BEZEL (ITEM 3) SUCH THAT NOTCH IS ON TOP. ORIENT BEZEL (ITEM 4) SUCH THAT NOTCH IS ON BOTTOM.
2) THE LEFT HAND DOOR IS SHOWN. FOR RIGHT HAND DOOR, REMOVE THE HINGE, LATCH AND SECURE TO OPPOSITE SIDE.
3) INSTALL ITEM 5 (OP30) ON THIS ASSEMBLY, EVEN THROUGH ITEMS ARE QUANTITY ZERO ON THE BILL OF MATERIAL.
4) KNOCKOUTS ARE TO BE SELECTED AT TIME OF FIELD INSTALLATION. DO NOT KNOCK OUT BEFORE THEN.
5) BRACKETS () IN WIRING DIAGRAM INDICATE ACTUAL WIRE COLOR. THESE WIRES WILL NOT BE STAMPED.
6) CHANGES TO THE WIRING DIAGRAM MUST ALSO BE MADE TO LABEL, PART NO. 61301608497.
7) ITEM NUMBER OF WIRE IS INDICATED IN A BOX ALONG WIRE RUN. THESE ITEM NUMBERS WILL NOT BE SHOWN ON LABEL, PART NO. 61301608497.
8) CUT 18.00 OFF ITEM 2 (CORD) ON THE OP30 CONNECTOR (ROUND) AND USE IT BETWEEN THE OP30 & 1TB.
9) STRIP CORD JACKET LENGTH APPROX. 5.00 STRIP WIRE LENGHT .31
10) COIL UP ALL CORDS AND PACK INSIDE BOX.
11) AFFIX ENGLISH TEXT LABEL AND LOGO LABEL (SUPPLIED WITH ITEM 5 OP30) TO FACE OF OP30 AS SHOWN. OP30 AND LABELS SUPPLIED WITH PARTS PKG FROM SWEDEN.
SEE NOTE 1
SEE NOTE 1
SEE DETAIL A
(2) SEE NOTES 8 & 9
37A REMOTE OPERATOR DISPLAY PANEL (RE)
OR 1
3A OP30
1TB1 (W) 1TB2 (BR) 1TB3 (G) 1TB4 (Y) 1TB5 (BK) 1TB6 (O) 1TB7 (BL) 1TB8 (R)
OR
5A1 (W) 5A2 (BR) 5A3 (G) 5A4 (Y) 5A5 (BK) 5A6 (O) 5A7 (BL) 5A8 (R)
1TB
2A1U3P1 (W) 2A1U3P2 (BR) 2A1U3P3 (G) 2A1U3P4 (Y) 2A1U3P7 (BK) 2A1U3P8 (O) 2A1U3P9 (BL) 2A1U3P10 (R)
26
2AGND (W)
GND (W)
2
SEE NOTE 9 & 10
2A CONTROL BOX
WIRING DIAGRAM (SEE NOTES 5, 6 & 7)
(13.78)
SEE NOTE 11
39 40
(18.78)
FRONT VIEW
(4.88)
SIDE VIEW
(37,31) (13.14) (30)
(16)
(34)
BEZEL OPEN AND SHOWN INSIDE OF BOX
(38)
(20)
6.57
DETAIL: A
C 120528 CC06/12/02
B 120479 CC05/17/02
A 120351 CC03/28/02
LTR ECO NO. BY DATE
REVISIONS
Getinge/Castle, Inc. 1777 East Henrietta Road Rochester, NY 14623-3133
DRAWING WAS MADE USING AUTOCAD SOFTWARE. CHANGES SHOULD BE MADE TO DATABASE AND NOT TO THIS DRAWING
DO NOT SCALE THIS DRAWING
THIRD ANGLE PROJECTION
ALL DIMENSIONS ARE INCHES UNLESS NOTED OTHERWISE
TOLERANCE UNLESS OTHERWISE SPECIFIED
MATERIAL
FINISH NONE
2 PLACE DECIMAL ±.02
3 PLACE DECIMAL ±.005
ANGLE ±1°
SCALE 1=1
DRAWN BY CDC 03/28/02
TITLE DISPLAY ASSY,RE,WALL MNT
PRODUCT WS
PROJECT NO. 8104
CHECKED KMG 03/28/02
SIZE D
SHEET 1 of 1
ENGINEERING APPROVED 04/02/02
DRAWING/PART NO. 61301608311
REV C

Figure 9–14. WIRING DIAGRAM, WATER SAVER 47A

At the time of this printing, final details were not available for this option.

Please contact Getinge/Castle Service at 800-950-9912